

INDIAN OCEAN

MICHAEL PEARSON



The Indian Ocean

The Indian Ocean, used and travelled by humans for over 5,000 years, is by far the 'oldest' sea in history. In this stimulating and authoritative study, Michael Pearson reverses traditional maritime history and looks from the sea to its shores – its impact on the land through trade, naval power, travel and scientific exploration. This vast ocean, both connecting and separating nations, has shaped many countries' cultures and ideologies through the movement of goods, people, ideas and religions across the sea.

The Indian Ocean moves from a discussion of physical aspects such as shape, winds, currents and boundaries, to a history from pre-Islamic times to the modern period of European dominance. Going far beyond pure maritime history, this compelling survey is an invaluable addition to political, cultural and economic world history.

Michael Pearson is Emeritus Professor at the University of New South Wales, Australia and Adjunct Professor at the University of Technology, Sydney. His previous publications include *Port Cities and Intruders: The Swahili Coast, India, and Portugal in the Early Modern Era* (1998) and *Pious Passengers: The* Hajj *in Earlier Times* (1994).

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The Indian Ocean

Michael Pearson



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Dedication

TO THE MEMORY OF THOSE WHO SAILED THESE WATERS BEFORE ME:

SINNAPPAH ARASARATNAM, CHARLES BOXER, FRANK BROEZE, ASHIN DAS GUPTA, HOLDEN FURBER AND DENYS LOMBARD

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Series editor's preface

Seas and oceans cover roughly two-thirds of the surface of the globe. Since time immemorial they have provided mankind with food. In our own age they have been found to contain a rich diversity of resources whose exploitation remains a matter of contention. But the waters of the world are more than a prime instance of nature's munificence, or a handy dumping ground for the refuse of civilisation. They can be formidable obstacles to societies lacking the will or the means to cross them. Equally they can be a powerful stimulus to technology and a challenge to the skills of those who, for any reason, seek to use them. They can unite the cultures and economies of widely dispersed and radically different peoples, allowing knowledge, ideas and beliefs to be freely transmitted. The ports that develop along their littorals often have more in common with one another than with the states or communities in which they are sited.

Yet since seas are in themselves so rich, and since for centuries they alone gave access to the wealth of many distant regions, land powers have put forward ambitious claims to exercise authority over them. In Europe the justification or denial of such title has concerned thinkers and apologists since the days of Columbus and Vasco da Gama. Economic, political or strategic necessity, real or imagined, stimulated the growth of navies, which became formidable expressions of the power of the modern state. Seaborne commerce entailed the construction of ships which, however propelled, were for long among the most expensive and technologically advanced products of contemporary economies. The shipping industries of the world support a labour force whose social organisation and way of life radically differ from those of the rest of society.

But there is more to the history of the sea than the impressive chronicle of man's triumph over the elements, or of battles fought, freight's carried and ships launched. Everywhere seas and oceans have had a significant cultural influence on the civilisations adjoining them.

These themes, and much else besides, are examined by Michael Pearson in this illuminating and authoritative book. Professor Pearson is internationally renowned for his innovative studies of the Portuguese pioneers in India and for his stimulating writings on the Indian Ocean and maritime history in general. In this new and fascinating work he brings together the fruits of a lifetime's scholarship. The learning is impressive, but lightly borne, the writing felicitous and the whole enriched by a warm sympathy for, and close familiarity with the area. His book will be invaluable not only to scholars, but to all interested in the history of an ocean for centuries the meeting place of some of the world's most distinguished civilisations and of political, economic and cultural forces from much of the globe. It is particularly fitting too that this study is from a scholar based in Australia, the source in recent years of so many seminal ideas and works on the history of the sea.

Geoffrey Scammell

Preface

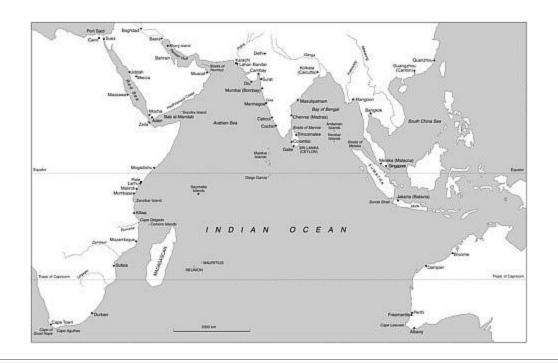
My thanks to my former colleagues in the School of History, University of New South Wales, especially its several Heads of School, and to successive Deans of the Faculty of Arts and Social Sciences. Onesimo Almeida and Charles Neu made it possible for me to spend a very productive (and extremely underemployed) four months at Brown University in the Fall of 2000. Librarians on four continents have been universally helpful. My thanks to Geoffrey Scammell for first inviting me to undertake this task, which fell to me after the untimely death of a dear colleague and friend, Ashin Das Gupta. Victoria Peters was a firm, but supportive, senior editor at Routledge, and is responsible for this book not being about twice as long as it is. For research assistance I thank Philippa Colin, and (yet again) Martin Braach-Maksvytis. My immediate family, Denni and James, have always taken a keen interest, while Ben and Mathew supported me from afar.

Michael Pearson

A note on names and measures

As is usual, deciding on these matters has been a perplexing task. I use modern, indigenous, spellings of place names when I consider they have achieved wide currency: thus Mumbai, Melaka, Kolkata, Chennai. When this is not the case I have used older, more familiar, spellings: thus Calicut, not Kozhikode. I am aware that many readers will be more used to Bombay than to Mumbai. However, many of these major ports have had several name changes over the centuries, and to follow these would be a confusing task indeed. Hence I use the most widely accepted modern name throughout this book.

My sources use a very wide variety of measures and units of currency. Where appropriate I have given metric equivalents, but in cases where the data merely gives an impression of change I have decided that conversions would be otiose, and I have retained the originals.



Introduction

Our perceptions of the sea have changed dramatically over the last few decades. In a First World country, such as the Island Nation of Australia, where the vast bulk of the population lives within an easy drive of the shore, it is part of recreational life. Many people have their own boats, and follow round-the-world yacht races with interest. Celebratory occasions often feature the Tall Ships, some of their sails emblazoned with the logos of their sponsors. Children 'check the surf' every day after school. Historic replicas of more or less authenticity are popular. One example is the replica of the *Batavia*, an ill-fated Dutch East India Company ship which in 1629 sped across the southern Indian Ocean towards Australia, but failed to turn north towards Indonesia soon enough and instead ran aground on the Abrulhos Islands, 60 kms off the Western Australian coast. Stirring scenes of mutiny, murder, survival and executions followed. Part of the original ship has been salvaged and is displayed in a purpose-built museum in Geraldton. Indeed, this part of the Western Australian coast has been christened, with an eye to the tourist market, the 'Batavia Coast,' complete with marinas, souvenirs, and expensive development projects. The replica was built in the Netherlands between 1985 and 1995 (the original was built in seven months in 1628) and has become a popular sight around the Australian coast.

For most of us today the sea has little practical significance. This is very recent. When I first went overseas from New Zealand in 1965 to America I travelled by sea, but this was just at the end of the sea era, for planes were becoming dominant, and I have only once travelled by sea again, except for pleasure. Yet, common perceptions aside, Australia is intricately tied in to the world, exporting raw materials and importing manufactured goods, and these are mostly carried by sea. Much of the world is dependent on oil from the Middle East, carried in great tankers across the Indian Ocean to First World destinations.

In the past the sea was much more central in our minds, connecting people and goods all over the world, inspiring great literature. Conrad, a novelist and a seaman, was one of the best. A ship is in the Arabian Sea, bound for the Cape of Good Hope:

The passage had begun, and the ship, a fragment detached from the earth, went on lonely and swift like a small planet. Round her the abysses of sky and sea met in an unattainable frontier. A great circular solitude moved with her, ever changing and ever the same, always monotonous and always imposing. 1

Or more generally, this is what the open sea means to those who travel it:

The true peace of God begins at any spot a thousand miles from the nearest land; and when He sends there the messengers of His might it is not in terrible wrath against crime, presumption, and folly, but paternally, to chasten simple hearts – ignorant hearts that know nothing of life, and beat undisturbed by envy or greed. 2

This maritime literature, with its universal appeal, presented the sea as both mystical and utilitarian, and with a strong preference for sailing ships. The stunning series of maritime novels by Patrick O'Brian are, significantly, about men on sailing ships two hundred years ago. In contrast, how many great novels or poems have there been about air travel or container ships? Such sea literature as there is today reflects its recreational role.

For most of the past five millennia the sea was important for humans. Those who travelled long distances often went by sea. Today few travel by sea, some goods go by air, and bulk goods which do go by sea involve very little human experience with the sea. With the end of passenger ships, and the new container ships and oil tankers which have a minimum of crew (indeed it is technically feasible to guide a ship by computers and satellites from land, so that no one need be on board from port to port) fewer people than ever before have any sea experience. Containerisation has also shrunk dramatically the number of people needed on the wharves to unload a ship. This is a major change of the last few decades. One sign of this is seen in the Muslim pilgrimage, the hajj. Up to the 1970s most pilgrims had some sea experience on their way to the Holy Cities. Today nearly all come by air, arriving at the huge airport at Jiddah, designed specifically to handle the pilgrims. Similarly, in the sixteenth century the Portuguese complained of

Muslim religious authorities travelling by ship and converting southeast Asia, but today swamis and godmen jet about. The air and the land have triumphed over the sea. Today's seafarers are mostly on cruise ships which are designed to replicate a floating block of luxury flats or a casino. Equally removed from the sea are the floating gin palaces in the harbours, and huge catamarans and hovercraft which treat the sea with negligent contempt. In 1993 I went on a Russian built hovercraft from Dar es Salaam to Zanzibar. I spent my time on deck trying to spot dhows and whales, but the locals all sat below in a large air-conditioned cabin and watched videos of 'Bollywood' movies. A western dilettante could experience the sea as exotic; the locals pragmatically saw it merely as a medium to be crossed to get from one place to another, no different from a trip by plane or bus, where indeed similar videos are provided to while away the time.

* * *

Historians have too often neglected the role of the sea in world history. This has produced skewed, incomplete histories of human kind. They have forgotten that 'In any pre-industrial society, from the upper Palaeolithic to the nineteenth century AD, a boat or (later) a ship was the largest and most complex machine produced.' As Reade noted,

The sea has always offered our species a range of resources which, while sometimes seasonal, are more reliable, less vulnerable to factors like drought and over-exploitation, than those available inland. From deep prehistory up to modern times, many communities have found that gathering food along and off the shore constitutes an entirely viable way of life. Their historical significance has been underrated because of the agrocentric presumptions built into much archaeological thought.4

In similar fashion, the Indian Ocean, the subject of this book, has been known and ignored, dismissed and described. European scholars often saw it as a passive region, part of the unchanging East, on which impacted exogenous Roman, Islamic and Western European influences. The Indian Ocean was brought into history when some external force came to it. According to the great historian of the Atlantic, Pierre Chaunu, the Indian Ocean had no intrinsic importance, and no unity: he considered 'the problem of whether this universe of Arab navigation should be considered as really autonomous compared with the Mediterranean one. Obviously not:

it was scarcely more than an extension of the eastern Mediterranean'. In this he echoes the great poet of the early Portuguese voyages, Luis de Camoens, who famously wrote that the Portuguese sailed 'por mares nunca dantes navegados' ('through seas never before navigated'). Contrary to this, we can note that the Indian Ocean is by far the oldest of the seas in history, in terms of it being used and traversed by humans. The first sea passage in human history was over its waters, regular connections between two early civilisations date back over 5,000 years. By comparison, the Atlantic is 1,000 years old, if one takes account of the Viking voyages, while the whole geographic Atlantic is just over 500 years old. The Pacific has seen long-distance voyaging for at most 2,000 years, though nowhere near the density of communication as that over the Indian Ocean. Indeed, Spate considers that

there was not, and could not be, any concept 'Pacific' until the limits and lineaments of the Ocean were set: and this was undeniably the work of Europeans.... The fact remains that until our own day the Pacific was basically a Euro-American creation, though built on an indigenous sub-structure. 6

The Indian Ocean is not only older, it also has a fundamentally different history. The Mediterranean has always been dominated by people from its littoral; the North Atlantic is the creation of people from one of its coasts; the Pacific arguably was created by Europeans, but in the Indian Ocean there is a long history of contact and distant voyages done by people from its coasts, and then a brief hiatus, maybe 150 years, when westerners controlled things. Andre Gunder Frank has claimed that the Indian Ocean area, extending to the South China Sea, has been central in global history in all the millennia up to about 1800, and now is re-emerging again as central. European dominance in the world covers at most 200 years out of a total of perhaps six millennia; so also external control of the Indian Ocean was transitory.

As I was writing my book I had the pleasure of reading Horden and Purcell's *The Corrupting Sea*. It struck many chords with me, as will be evident throughout this book. Indeed, I have had to restrain myself and try not to quote too often from their stunning book, and also from Braudel's older classic. It is curious that the Mediterranean has now inspired two brilliant books, Braudel's for long a classic, Horden and Purcell's

unarguably destined to become one. These are books which appeal to the historical profession in general, and indeed also to a wider reading public. Other maritime spaces have failed to generate such works. Certainly there are a host of worthy accumulations of data, and perhaps the present book is one such, but there is nothing to match these two path-breaking books on the Mediterranean. I wish I could say, with Isaac Newton, that 'If I have seen further, it is by standing on the shoulders of giants', but the giants have not written about my ocean.

This may be because the Mediterranean is so much smaller, more manageable, than the oceans. Is the history of a sea different from the history of an ocean? Are the Baltic, North and Mediterranean seas in the same category as the Pacific or the Atlantic or the Indian oceans? The difference of scale is obviously vast: the Baltic covers 414,000 km2, the North Sea 520,000, and the Mediterranean 2,516,000. The Indian Ocean, on the largest definition, going down to Antarctica, covers no less than 68,536,000 km², that is nearly twenty times bigger than the three seas combined. Horden and Purcell have created an interesting map which shows which parts of their sea are out of sight of land.9 There is surprisingly little, but of course this is very different for the Indian Ocean. But maybe this is a difference of scale, not a generic difference. Ties across oceans must be less strong than across seas, but perhaps the best way to investigate this is to consider all passages in seas to be merely coastal. Most passages in oceans are also coastal, but then they also have the vast voyages when ships were out of sight of land for weeks and even months, as we noted Conrad rejoicing in. Oceanic passages can connect people from very distant places; by definition passages across seas do not do this.

There is also a difference between a history of an ocean and a maritime history of a particular country. Braudel and Matvejevic10 were trying to write a history of a sea as a unity. I consider that these two histories of the Mediterranean failed to establish the unity they claimed, for both of them ignore, or are ill-informed about, the southern shores of this sea. Leaving this aside, their aim was similar to mine, to O.H.K. Spate's in his book on the Pacific, and to the other authors in this series on the seas in history. The contrast is with books which study the maritime history of a particular terrestrial place, such as Broeze's book on Australians and the sea, Mollat's

on Europe and the sea, and the collection that Ashin Das Gupta and I edited which was on India and the sea.11

My work differs from these others in two important respects. Braudel ostensibly wrote on the later sixteenth century, while Spate's book on the Pacific deals only with the period since the arrival of Europeans. My ambitious aim is, first, to write about the whole of the Indian Ocean over the whole of its recorded history. Second, I want to avoid the concentration on the material which characterises Braudel, and most books on the Indian Ocean. Horden and Purcell noted of Braudel that 'It is material life – especially towns, ships, and long-distance trade, that mainly captures Braudel's imagination... Perceptions, attitudes, beliefs and symbols ... all these are reduced to a relatively few pages.'12 The history of the ocean is not just a history of trade and warships. I aim to describe both material and mental frameworks, the psychological as well as the geographical.

Rather than look out at the oceans from the land, as so many earlier books have done, a history of an ocean has to reverse this angle and look from the sea to the land, and most obviously to the coast. There has to be attention to land areas bordering the ocean, that is the littoral. A history of an ocean needs to be amphibious, moving easily between land and sea. As a maritime historian, I will cover inland events only to the extent that they impinge directly on the ocean, so that my focus is the sea itself, and the coast. Yet often I have had to travel far inland, and well beyond the shores of the ocean: to Potosi and Rome, London and Mecca.

In thinking about maritime history, comments by the late Frank Broeze have been useful. Discussing a recent book on the Atlantic, he noted 'the vital conceptual problem of how far one should go in linking maritime themes and developments to their terrestrial sources and dynamics' and complained that

First, and perhaps most important, [the author] does not offer any definition of what I in shorthand would call 'oceanic history.' What is the grand design that holds his book together, and how far inland does the sea extend its influence when one is dealing with such various themes as naval history, shipping, the fisheries, colonisation, migration and ports? How can maritime communities be identified and what kind of relationship do they have with their hinterlands? 13

These questions were on my mind as I wrote this book.

Chaunu wrote dismissively of 'The false concept of unity in the Indian Ocean.'14 The unity or otherwise of the Indian Ocean will be a recurring theme throughout this book, for this in turn raises the central question of whether the history of an ocean has any heuristic value. Is there something which we call the Indian Ocean and which can be studied, analysed, treated as a coherent object? Here I make an absolutely fundamental distinction between notions of unity, as compared with merely talking about intraocean connections.

At first glance it is difficult to find elements of unity in this vast ocean. Most of the population of the littoral states today identify with their state, not with the ocean beyond the borders of the state. If they seek a wider identity, it would not be a maritime one but rather one based on religion, such as Islam, or a wider geography, such as Asia, Africa, the Middle East.15

As usual Braudel is helpful here. He made the essential point that geography is not enough: 'The Mediterranean has no unity but that created by the movements of men, the relationships they imply, and the routes they follow.'16 But statements which address this fundamental matter are often nebulous and imprecise (perhaps necessarily so). Consider the following statement about the unity of the Mediterranean from Horden and Purcell:

the region is only loosely unified, distinguishable from its neighbours to degrees that vary with time, geographical direction, and topic. Its boundaries are not of the sort to be drawn easily on a map. Its continuities are best thought of as continuities of form or pattern, within which all is mutability. 17

Chaudhuri, a distinguished historian of the Indian Ocean, has also circled around this problem of unity.

There was a firm impression in the minds of contemporaries, sensed also by historians later, that the ocean had its own unity, a distinct sphere of influence. Means of travel, movements of people, economic exchange, climate, and historical forces created elements of cohesion. Religion, social systems, and cultural traditions, on the other hand, provided the contrasts. 18

Yet he elsewhere asked, 'Does the history of the civilizations around and beyond the ocean exhibit any intrinsic and perceptible unity, expressed in terms of space, time, or structures, which allows us to construct a Braudelian framework?' He found 'a basic underlying structure, the ground floor of material life, which remained invariant while displaying variations within certain limits.' Yet his conclusion is that for certain kinds of analysis the Indian Ocean is a single unit of space, for others it is not and must be broken up.19

More particularly, scholars have written about such elements of commonality as monsoon winds, ports, ships, sailors, and long-distance trade. Pirates and fisherfolk are ubiquitous, the former to be seen as macroparasites, human groups that draw sustenance from the toil and enterprise of others, offering nothing in return, the latter equally predatory, for unlike peasants they extract but do not cultivate, take but do not give. Niels Steensgaard is sceptical, claiming that at the least the Indian Ocean had less unity than did the Mediterranean, the Baltic, or the Malay–Indonesian archipelago. This opinion is based on his finding that long-distance trade was marginal to the total economy of the area.20 But this concern with the material may have led him to ignore other elements which perhaps do demonstrate some unity.

Rene Barendse has also ruminated on this matter. He claims there were elements of it in the seventeenth century:

In spite of this great variety of landscapes the lands bordering the Arabian seas still had a lot in common. It is well justified to speak about a single maritime world. There was the garland of harbours along the coasts: échelles where maritime trade met land-routes. There were the common kinds of ships used. There was the current of new products cultivated — moving generally west to east, like tobacco, coffee, tea and maize in our period. There were the coins used, like the ubiquitous larin in the sixteenth century and the Maria Theresia Taler in the eighteenth. 21

Yet he later provided an important caveat, namely that we must be careful, in our search for elements of unity, to avoid negatively contrasting an essentialised Indian Ocean with an implicitly dynamic Europe. 22

World historians have been discovering areas which make up 'worlds', thanks to interaction and connections within them. One influential schema found that the three main forms of cross-cultural interaction are migration, commerce and conquest, or MCC for short. Yet one could certainly add other criteria: the movements of people who go out and return, or of

disease, or of cultural elements like religion or ideology. In any case, this preliminary discussion is designed not to provide an answer, at least not yet, but merely to raise the question of whether or not we can find enough strands to depict a firm rope which binds together the ocean. Tentative answers will appear throughout what follows. Unity may be too big a word anyway. No one would think of writing about the unity of the United States, or of the Christian religion. Historians usually deal with diversity and change, not with some static monolith. At times it may be more useful to disaggregate this vast body of water, and focus on the Bay of Bengal, or the Gulf, or one of the islands.

We certainly can find links and connections; the real problem is their significance. Many historians have stressed that connections, an early version of the currently fashionable concept of 'globalisation', were very much in place in the world long before modern transportation and communications revolutions produced the intricately connected world we live in today. Eric Wolf stressed interchange in the world at 1400. John Russell-Wood wrote on mingling and connections created by the far-flung Portuguese empire, while Fernand Braudel took a global compass when he wrote of civilisation and capitalism.23 It is crucial to acknowledge that most connections are rather minor, in the sense that most trade is coastal, most seafarers are actually just fisherfolk who do not go very far out to sea. Braudel stressed that the vast majority of navigation in the Mediterranean was coastal, in small ships of less than 75 tonnes. For these travelling bazaars the land was always in sight. These, 'the proletariat of the sea', went ashore frequently to peddle their wares. 24 Romila Thapar, referring to trade from the Indus Valley Civilisation with West Asia from 3000 BCE, followed this explicitly:

The more spectacular maritime trade was occasional, but in its interstices there was a steady small-scale contact, often coastal, which involved transporting essential supplies quite apart from luxury items. These would be ships which, to use the felicitous phrase of Braudel, tramped from port to port and were travelling bazaars, largely covering the more confined circuits. Such a low profile trade continues to the present. 25

When Braudel wrote of the Mediterranean he found very far-flung connections indeed: with the Baltic, the Atlantic, the North Sea and the Indian Ocean. So also with the Indian Ocean. Here are some more or less random examples: in 1731 the slave ship *Diligent* left the port of Vannes, near Nantes, bound for West Africa to buy slaves. Part of the cargo, which was to be used to buy slaves, was 7,000 lbs of cowry shells from the Maldives, and a large number of lengths of Indian cloth.26 Indeed, these particular cowries were only a small part of a vast humble trade. They were used as currency from West Africa to China. Coming from the Maldive Islands, they have been traded for some 1,500 years. At the height of the slave trade in the 1720s perhaps one million pounds were imported to West Africa to pay for slaves each year.27 The Jesuits in China used for mass wine made in Portugal which thus came clear across the Indian Ocean. The coco-de-mer, which comes from the Seychelles, drifts all around the Indian Ocean and is prized everywhere for its medicinal and aphrodisiac qualities.28 Eastern Vikings, originating from what is Sweden today, travelled to trade via the Black and Caspian Seas, to Abbasid Baghdad, and Isfahan, in other words to part of the Indian Ocean world.29 In the mid nineteenth century a town was established in Western Australia to breed horses for the Indian Army. It was given the appropriate name of Australind. This scheme failed, but later so many horses went from New South Wales to India that they were known as Walers. Karri and jarrah trees in southwest Western Australia were exported in bulk to India to be used as railway sleepers. Similarly, there have been massive movements of people over the ocean: people went from Indonesia to Madagascar, slaves came to Mauritius from Madagascar, the East African coast, India and Java; Zheng He sailed all around the littoral; half a million indentured labourers came from India to Mauritius in the nineteenth century; Europeans crossed half the world to get to the ocean. Muslim influences spread far and wide. In Zanzibar one group uses a certificate of authenticity and authority issued in Indonesia. In Mayotte, off Madagascar, South Asian Islamic reformers are active; in Zanzibar Islamic books, including Qurans, come from Egypt, Iran, Saudi Arabia, India and Pakistan.30

Not only people travel and form connections. The southern bluefin tuna is a magnificent fish. Their average weight is 25 kgs, and they can live for up to 40 years. They breed in the waters south of Java, and then go down the coast of Western Australia. There they separate, with some going across the

Indian Ocean to the waters of Southern Africa, and others across the Great Australian Bight, around Tasmania, up the east coast, over to New Zealand, and then north and west and so back to Java to spawn.31

Yet as we look at these connections, a matter absolutely central to my discussion, we need to proceed with caution. If one finds a Roman coin in south India, what does this show? Does it mean that Romans themselves traded to this area? Or is this a coin which arrived over several stages? The coin is there, but does this show there was an Indian Ocean world, in this case linked to the far-off Mediterranean, with which it had some sort of commonality and integration? Remembering that most long-distance trade was in luxuries only, how many people were affected by these connections? Similarly with Chinese ceramics on the Swahili coast. If we find Buddhism, which originated in India, in Java, does this make Java a cultural colony? Connections go two ways. A Chinese pot will be used in different ways in different places, and may be copied or modified. A Hadhrami preaching Islam will find a different response in Kilwa from that in Aceh or Hyderabad, and his words will have different meanings in these two places. European weaponry found different sorts of acceptance in different places.

Clearly we need to consider Rene Barendse's notion of the 'greater' Indian Ocean, analogous to the Analistas' 'long' sixteenth century. The former highlights connections far past the geographical limits of the ocean, the latter far past the arbitrary dates of 1500 and 1600. What is important is the turning points, not the turning of centuries. On this matter I have found a central theme in *The Corrupting Sea* extremely useful; I will use their terminology frequently in this book. Horden and Purcell distinguish between history *in* the Mediterranean, and the history *of* the Mediterranean. There is 'history *in* the Mediterranean – contingently so, not Mediterraneanwide, perhaps better seen as part of the larger history of either Christendom or Islam – and history *of* the Mediterranean – for the understanding of which a firm sense of place and a search for Mediterranean-wide comparisons are both vital.'32

In 1744 John Campbell wrote that 'The peculiar Pleasure and Improvement that Books of Voyages and Travels afford, are sufficient Reasons why they are as much, if not more read, than any other Branch of polite Literature.'33

I hope people will read my book. To this end, I want it to have a whiff of ozone, not just be a collection of statistics about trade. I have accumulated numerous first-hand accounts of what it was like to travel over the ocean, the earliest being from Fa-Hsien, a Buddhist pilgrim from China, who returned by sea to China in 413–14, and the latest an account of sailing in the Volvo Around the World Race in 2001–2. I have people going on pilgrimage to Mecca, I have Alan Villiers in a dhow and on a great four-master barque with 30 sails and 35,000 square feet of canvas, I have migrants going to Australia, I have Salem whalers and sealers, I have fleet commanders, Somerset Maugham, E.M. Forster and Mark Twain. I have even (tried to) read novels by Wilbur Smith. I will quote extensively from these actual accounts of life on the Indian Ocean, inspissating my dry prose with their compelling descriptions.

I want to write a more total history than has appeared so far. With all due deference, too many previous works have been almost entirely histories of trade, and especially European trade, rather than of the ocean. I want lots of connections, the ocean acting as a transmitter for disease, religion, tourists, goods, information, not just pepper and cotton cloths. To provide space for what really interests me, I will sometimes merely summarise existing literature on topics already well covered, especially to do with politics and trade, and refer the reader to more complete specialist works.

One other caveat. I am aware that my book fails to pay the amount of attention to the Malay maritime world that a southeast Asian specialist would expect. Data to be presented throughout the book makes clear that in many important matters India was the fulcrum of the ocean around which all other areas swung. India, now called South Asia and including India, Pakistan and Bangladesh, has by far the bulk of the population – about 70 per cent of the total populations of all the countries ringing the ocean.34 South Asia has a combined economy which dwarfs all the others around the ocean's rim. There are also compelling geographical reasons for not going much beyond the Straits of Melaka. The Malay world often was more tied in to the Chinese world than to the Indian Ocean one. The eastern boundaries of the ocean are porous, with the Indian Ocean flowing imperceptibly into the South China Sea and the Pacific Ocean. There is a clear contrast with the other areas of the ocean, and especially the western

side, the East African coast. Littoral boundaries are easy here, as there is no connection with some other sea, and so also all around the shores of the Arabian Sea and the Bay of Bengal. To limit my study to around the Straits of Melaka also accords with my own expertise, such as it is, and the task in front of me becomes slightly more manageable if I can avoid going too far into Indonesia.

Even so, my task is a gigantic one, Obviously I have not been everywhere around the ocean, but then Matvejevic pointed out that 'Like Ibn Khaldun and Mercator, I have followed Ptolemy's lead and used the testimonies of travellers who have been where we have not been and seen what we have not seen.'35 Similarly, Horden and Purcell quote Epiphanius, who said 'the discoveries which our insignificant intelligence... has been able to make come from the times and opportunities available; we in no way promise information about everything in the world.'36 Nor have I read every book, visited every archive. In part this is because to do this would be not to write any book at all. Braudel noted of the small and young Mediterranean that the sources are vast: 'To prospect and catalogue this unsuspected store, these mines of the purest historical gold, would take not one lifetime but at least twenty, or the simultaneous dedication of twenty researchers.'37 So also Oskar Spate when he introduced his great history of the Pacific; his caveats apply very precisely to my book too:

If it would take a lifetime to visit all the shores and islands of the Pacific, one sometimes feels that it would take nine lives to master fully the vasty literature of the deep.... The work is inevitably based on secondary source and on printed collections of primary and sub-primary sources.... I can only say that I have tried to arrive at a synthesis drawn from reputable authorities. I have no doubt at all that specialists will find superficialities and errors in my treatment of some of the multitudinous topics which a study of this scope and scale involves. But this is the occupational hazard of playing the generalist game, and I have also no doubt that it is a game well worth playing, as an effort to see the theme as a whole, and not as cut up into discrete sectors. 38

As Braudel stressed for the Mediterranean, there is still a vast mass of documentation to be studied, and how much more so for the Indian Ocean. Only a minuscule part of the coasts of the Indian Ocean have been searched by maritime archaeologists so far. 39 We are told that less than 5 per cent of the deep sea has been seen at all; 40 so also for the potential sources

available to write a history of the Indian Ocean. I have not even read all the books, but I take heart from Janet Abu-Lughod's claim that at a certain point the historian reaches closure, which we can do regardless of how many other books there may be, because we have already achieved pattern recognition (not that I would endorse all of the patterns that she finds).41 Specialists will no doubt find gaps and even misstatements or lack of familiarity with the most recent esoteric article, but I hope that they will find the patterns interesting.

Organising my material has been a perplexing task, though no doubt this goes with the territory of the historian. Conventionally the history of the Indian Ocean has been divided into four periods: before Islam; from then to the arrival of Europeans in 1500; early Europeans, to about 1800; European dominance. In the 'modern' period the important dates are considered to be 1498 (Vasco da Gama), 1757 (beginning of British conquest of India) and 1869 (Suez Canal). Perhaps perversely, I find only two major periods. The first chapter of this book will deal with the deep structure of the ocean, and here my debt to Braudel is plain to see. This will include climate and topography, currents and winds, all of which are easy enough, but the picture becomes more complicated once people are introduced, for this again raises questions about limits and boundaries and connections and littorals. The first historical period will deal with the history of the ocean from its beginnings in geology and myth to around 1800. There are two assumptions here. First, it implies that I do not find the early Europeans introducing any qualitative change into the ocean for the first three hundred years of their presence there. This is a familiar, yet difficult, claim. The difficulty lies in the fact that from 1500 we have much more documentation, most of it European. The task then is to write an autonomous history of the Indian Ocean using documentation mostly generated by those Europeans who later came to dominate the area. Second, I claim to be able to find some broad continuities right through these millennia. This is, however, very definitely not to say that this is the unchanging and mysterious East where time stood still until the northern Europeans took over. Certainly there were changes as well as continuities, and these will be presented, but in an old-fashioned way I still believe that modern industry and capitalism, the Great Transmutation in Europe, did make a difference. The impact of these important exogenous economic and technological changes into the ocean around 1800 marks a systemic or qualitative change, and introduces my second broad historical period. It was in the early nineteenth century that many of the deep structure elements outlined in my first chapter become much less important: monsoons, currents and land barriers are all overcome by steam ships and steam trains in the service of British power and capital; the Indian Ocean world becomes embedded in a truly global economy and for the first time production, as opposed to trade, is affected. This tendency to global integration continues to today, so that, *pace* Horden and Purcell, so strong is this integration to worlds far beyond the ocean that it is now impossible to write a history of the Indian Ocean. All Indian Ocean history is now a history in the ocean, part of a larger, indeed a global, story.

Chapter 1

Deep structure

Braudel wrote of the first part of his classic study of the Mediterranean that it dealt with 'all the permanent, slow-moving, or recurrent features of Mediterranean life. In the pursuit of a history that changes little or not at all with the passing of time, I have not hesitated to step outside the chronological limits of a study devoted in theory to the latter half of the sixteenth century.'1 This is what I aim to do in this chapter. And like Braudel I am not limiting my study to any discrete time period. I then can draw data from about five millennia, always however being aware that this must be data to do with invariant matters. I will discuss the name of the ocean, its geographical boundaries, its topography, winds and currents, and then introduce people. This is when the whole study of deep structure will become problematic and complicated, as we will see.

Frank Broeze suggested that the term 'Indian Ocean' is inappropriate. He wrote of 'a string of closely related regional systems stretching from East Asia around the continent and across the Indian Ocean to East Africa (to which sea space a new generic name, such as "the Asian Seas", might well be given)'.2 Despite my customary privileging of India, I also have some hesitancies about the term 'the Indian Ocean'. The terminology implies that India is the centre, the fulcrum, but this needs to be demonstrated, not just assumed. I recently argued that a better name for the part of the Indian Ocean known as the Arabian Sea was the Afrasian Sea. 'The Arabian Sea' seems to give Arabs a role much more prominent than is appropriate. Some years ago people began to write about Eurasia, the idea being to stress connections rather than the artificial separation between a reified (and implicitly successful) Europe and a timeless (implicitly backward, even redundant) Asia. We were reminded of millennia of contact, especially between the eastern Mediterranean and the Arabian Sea. Now some have urged us to go further still. In what seems to be the ultimate uniformitarianism, the desire to show 'one world' before capitalism, to stress links between areas long before the European voyages, the term Afrasia has been suggested. This would make up a vast area, with western Europe to be seen as a tiny appendage on the western edge. But this also is controversial, for it is stretching things to see most of sub-Saharan Africa sharing in the history of Eurasia before the European voyages. This however does not apply to the

Swahili coast. I suggested that the appropriate term for what used to be called the Arabian Sea could be the Afrasian Sea. This is an encompassing term and does include East Africa. Chandra de Silva recently wrote that it was incorrect to call this coast part of the Indian Ocean, and I agree with him, but to separate it out and call it the African Sea, as he suggests, seems unnecessarily divisive: the great advantage of the Afrasian Sea notion is its inclusiveness, and its failure to imply the dominance of any one area around the shore.3

Mutatis mutandis, I could now argue that this term would be even more appropriate for the whole area of what is conventionally called the Indian Ocean, for it would avoid assuming Indian centrality as implied in the Indian Ocean term, or Arab dominance as in the Arabian Sea, and instead would be all inclusive, taking in not only the Asian shores, which clearly are most important if only because of length, but including also the often ignored area of the East African coast. Yet this book is called *The Indian Ocean* so, a little reluctantly, I must continue to use this term. I will also use the familiar term of the Arabian Sea, while, to demonstrate impartiality, the Persian/Arabian Gulf will be simply the Gulf. My aim so far has merely been to alert the reader to the assumptions, arguably invalid, in the use of this term. It really all depends on where one is standing when one looks at and names an ocean. After all, Arabs refer to the Mediterranean as the Syrian Sea.

In any case, to assume that the Indian Ocean unduly emphasises India is to ignore the way a major group who were not Indian referred to the area. Arabs were happy to call the ocean al-bahr al Hindi, and indeed our term the Indian Ocean is an exact translation of this Arabic phrase. *Hind* derived from the Sanskrit, *sindhu*, to Persian and Arabic hind, and then via Greek and Latin to modern European languages as some variant of India. It is true that sometimes the Arabs were referring only to the Arabian Sea, but at

times they also seem to have used the term to refer to an area that we today call the Indian Ocean.

The Indian Ocean covers some 27 per cent of the maritime space of the world. It is the third largest ocean in the world, and covers 14 per cent of the total globe. Before I try to delineate its borders, we can first consider the whole matter of borders as such. One of the great advantages of writing maritime history, or for that matter the currently fashionable world history, is that by definition one escapes the land/political borders which have shackled traditional history for so long. States fade into the background in this sort of history, and we can look rather at 'worlds' and 'zones', along the lines of the MCC discussion in the introduction (see page 7). This said, I still have to depict the geographic (not human) limits of the Indian Ocean.

It is fairly straightforward. The longitudes are roughly 20° E to 110° E. Southern Africa, more precisely Cape Agulhas, is one limit, and we then go around the coast, including the Red Sea and the Gulf, past South Asia and through the Bay of Bengal and so to what geographically is the obvious limit, that is the Malay peninsula and the Sunda Islands. Past this the monsoons change. Possibly the Sunda Deep of the Java Trench off the southern coast of Java, which is 24,442 feet (7,450 metres) deep, forms a bathymetric boundary which separates the southeast Asian maritime region from the Indian Ocean. From here we go south to Cape Leeuwin in southwest Australia.

So far we have followed the borders as recognised by the United Nations Oceans Atlas, and the International Hydrographic Organisation (IHO), but both these authorities then go past Western Australia to around Melbourne, the west coast of Tasmania, and then down to Antarctica. This opinion is not to be taken lightly, especially as it is congruent with those of Alan Villiers, who was a real sailor.4 Nevertheless, I would be inclined to stop at Cape Leeuwin, and go no further east. Certainly I agree with the International Hydrographic Organisation on the southern boundaries. In early 2000 the IHO delimited a fifth world ocean, the southern parts of the Atlantic, Indian and Pacific. This extends from the coast of Antarctica to latitude 60° S.5 We still have a lot of the Great Southern Ocean included in the Indian Ocean, including the peri-Antarctic islands on either side of 45°

S, namely the Prince Edward Islands, Iles Crozet, Iles Kerguelen, Ile Amsterdam, Ile Saint-Paul, McDonald Islands, and Heard Island. From the late eighteenth century these islands provided places for sealers to winter, and today most of them have permanent populations of scientists, but they will play a small part in our history of the Indian Ocean. They will be of interest only when we have ships using the roaring 40s and the fearsome 50s as they go from one end of our ocean, south Africa, to another, western Australia. For most of history ships never went below the tropic of Capricorn.

One way to visualise what I think of as the Indian Ocean proper is to see it as a vast equilateral triangle. The base is the tropic of Capricorn, that is 23° 27' S. The two sides go north, the western one then including the Swahili and south Arabian coasts, up to north India, and then down from the apex through Burma, Sumatra and to northwest Australia. The only real problem with this is that it excludes the Gulf and Red Sea, and these were intricately connected with the Indian Ocean; apart from this it works quite well to depict the area of concern in this book. An alternative, perhaps even one to be preferred, is to see it as a vast letter M, with the Red Sea and Gulf on one side, and the Bay of Bengal on the other, divided by India.

The ocean proper, the vast wide expanse of water that we quoted Conrad on in the introduction (see pages 1–2), was well described by a Persian traveller in the eighteenth century:

It is not possible to measure the full extent of that sea except with the eye of fantasy. No one will ever delve to the bottom of that sea except by plunging into the waves of his wildest dreams. We were surrounded by a limitless desert of water. The days were white and the nights were black. You could not spy a single speck afloat on those fields of water, only the dark blue of the heavens reflected on the blue black of the sea.8

Opposed to this are the various bays and smaller seas and gulfs. Joseph Conrad saw the bays, in this case the Gulf of Thailand, as being rather different from the real ocean. One of his characters said that

from Bankok [*sic*] to the Indian Ocean was a pretty long step.... Extreme patience and extreme care would see me through the region of broken land, of faint airs, and of dead water to where I would

feel at last my command on the great swell and list over to the great breath of regular winds, that would give her the feeling of a large, more intense life. 9

If then there is a wide, expansive Indian Ocean, around its edges and margins are a host of seas. Among them are the Mozambique Channel, Red Sea, Gulf of Aden, Arabian Sea, Persian Gulf, Gulf of Oman, Bay of Bengal, Andaman Sea, Strait of Melaka, and the Laccadive Sea. Yet the same Sulaiman who wrote about the vast, open ocean also commented sourly on too much schematisation; he travelled where I have not been, and so must be listened to:

There is not really a clear separation between the seas we crossed [from the Gulf to Siam]. An ordinary traveller would not be able to perceive where one sea ended and the next began. . . . The scholars of travel and geography, confronted with many different place names... have wandered into the discords of choppy seas, doldrums and foul winds and they divide the great expanse of water which lies along this path into seven distinct parts. <u>10</u>

The topography obviously varies from place to place, being for example quite different in the bays as compared with coasts exposed to the wide ocean. Some shores are uninhabited desert, others cut off from the interior by impenetrable mountains, but most of the shores of the Indian Ocean are not quite as inhospitable as these examples. In India a fertile coastal fringe, especially in the south, the area of Kerala, is backed by the high mountain range called the western Ghats, but these are nowhere completely impassable. So also on the Swahili coast, where again behind a productive coastal zone is the nyika, a mostly barren area difficult, but not impossible, to travel through on the way to more fertile land further inland. On the northern shores of the ocean the coastal fringe is mostly much less productive, and leads to inland areas which often are hostile deserts. Yet topography has favoured this area even so, for the Red Sea goes into the Gulf of Aden, and this gives places around there, especially the Hadhramaut area east of Aden, a possible role in servicing ships going to East Africa or western India.

We will discuss islands presently, but most of those in the Indian Ocean proper are relatively isolated and scattered. Such is not the case in Indonesia, and this then provides another reason to place this area outside the Indian Ocean proper. Geography makes the sea in the island-studded

Malay world much more central; if one likes, this is a much more maritime area, both topographically, and (as we will see soon) humanly. The region has an extremely high ratio of coastline to land area; indeed the highest in the world if one takes into account population.11 The Malay world can be seen as a Mediterranean area, just like the Gulf of Mexico/Caribbean area. All three are enclosed, but with access to oceans, that is to the Indian Ocean and Pacific in the first, to the Atlantic in the last two. And when we add in rivers this applies even more strongly to make this a much more aquatic area, strongly contrasting with the situation in the Indian Ocean. The only comparable area in the true Indian Ocean may be the area that the Portuguese called the Sea of Ceylon, that is the narrow strait of the Gulf of Mannar between Sri Lanka and southeast India, where again geography dictates that the sea is much more central simply because it is close on both sides of this passage.

Choke points are another topographical matter that influence the nature of the Indian Ocean. The Straits of Melaka, at their narrowest, where they join the Singapore Strait north of the Karimum Islands, are only 8 nautical miles wide. and today are used by 50,000 ships a year, including small country craft. The actual width of the channel that ships can use in this area is only 2½ miles off Melaka and a mere 1 mile off Singapore. The Persian/Arabian Gulf at its narrowest section, in the Straits of Hurmuz, is only 48 km (21 nautical miles) wide, and passage is made more difficult by many islands and reefs. The Suez Canal is an obvious choke point, as also is the Strait of Tiran, which is only about 5 kms wide at its narrowest point. At the entrance to the Red Sea, the Bab al Mandeb at its narrowest is only 12 kms wide. It is at these choke points that port cities are usually found, as we will see.

Topography provides other important bounds and constraints. Some areas were very difficult to navigate. The Gulf is one such, but the Red Sea provides the best example. Past Jiddah was especially bad, so that only small specialised ships could make the passage from there to Suez. An Arabic account from the ninth century makes clear the dangers. Ships from the Gulf port of Siraf

put into *Judda*, where they remain; for their Cargo is thence transported to *Kahira* [Cairo] by Ships of *Kolzum*, who are acquainted with the Navigation of the Red Sea, which those of *Siraf* dare not attempt, because of the extreme Danger, and because this Sea is full of Rocks at the Water's Edge; because also upon the whole Coast there are no Kings, or scarce any inhabited Place; and, in fine, because Ships are every Night obliged to put into some Place of Safety, for Fear of striking upon the Rocks; they sail in the Day time only, and all the Night ride fast at Anchor. This Sea, moreover, is subject to very thick Fogs, and to violent Gales of Wind, and so has nothing to recommend it, either within or without.12

A pilgrim in 1183 wrote of the entry to the important port of Jiddah:

The entry into it is difficult to achieve because of the many reefs and the windings. We observed the art of these captains and the mariners in the handling of their ships through the reefs. It was truly marvellous. They would enter the narrow channels and manage their way through them as a cavalier manages a horse that is light on the bridle and tractable. They came through in a wonderful manner that cannot be described....

He had been eight days at sea, and it had been a hazardous time:

There had been the sudden crises of the sea, the perversity of the wind, the many reefs encountered, and the emergencies that arose from the imperfections of the sailing gear which time and again became entangled and broke when sails were raised or lowered or an anchor raised. At times the bottom of the jilabah would run against a reef when passing through them, and we would listen to a rumbling that called us to abandon hope. Many times we died and lived again. 13

Daniel's account in 1700 similarly makes clear the hazards, in this case on a voyage from Suez to Yanbo, the port of Medina. His ship anchored each night in order to avoid reefs, rocks and shoals, and this short voyage took from 12 July to 10 August. They only reached Jiddah on 29 August. One of our most graphic accounts comes from Tomé Pires in the early sixteenth century. In the Red Sea

there are many rocky banks and they are difficult to navigate. Men do not navigate except by day; they can always anchor. The best sailing is from the entrance to the strait as far as Kamaran. It is worse from Kamaran to Jiddah and much worse from Jiddah to Tor. From Tor to Suez is a route for small boats even by day, because it is all dirty ('cujo') and bad. 15

In our own time it has got no better. Jacques Cousteau sailed there many times, but even in the early 1950s much of it was uncharted and very

dangerous. This applied especially to the Far-Sans reef complex, 350 miles long and 30 miles wide, along the Yemen and Hijaz coasts. It is a 'demented masterpiece of outcrops, shoals, foaming reefs, and other lurking shipbreakers.' Things are made worse by another deep structure element, the winds, which for most of the year are north and north-westerly, so that sailing south is extremely hot. 16

Scorching winds were an environmental hazard which many travellers commented on. Isabel Burton was in Aden in January 1876 and found it very hot: 'I think it is to Aden that is attached the legend of the sailors who died and went to a certain fiery place, and appeared, and on being asked why they came, they replied that they had caught cold, and had leave to come to fetch their blankets.'17 Similarly Marco Polo in Hurmuz: 'The fact, you see, that in summer a wind often blows across the sands which encompass the plain, so intolerably hot that it would kill everybody, were it not that when they perceive that wind coming they plunge into water up to the neck, and so abide until the wind have ceased.'18

We have noted the dense network of islands characteristic of the Malay world. The more isolated islands in the ocean play a rather different role. Geologically they are various. Some are granite fragments of larger land masses, such as Madagascar, Sri Lanka, Socotra and part of the Seychelles. Other are volcanic from submarine eruptions: Mauritius, Reunion, Comoros, Kerguelen, while others are formed by coral buildup, such as the Cocos Islands. Many were unpopulated until recent times, yet in the last few centuries several of them, taking account of the deep structure matter of their location, have acted as hinges, connecting very distant parts of the ocean. There are of course variations to do with size and distance from the continent: for example, Sri Lanka has been profoundly influenced by its larger neighbour to the north. Some smaller islands contiguous to the continent are hardly to be considered as islands at all. Kilwa, Mombasa, the islands off the Burma coast, are really just partially detached parts of the mainland. Others are so large as to share mainland characteristics, where the influence of the sea is not paramount: Madagascar, Sumatra, obviously Australia.

Even these deep structural topological characteristics of our ocean can change over time. We will consider changes in climate presently, but some coastal areas have been profoundly affected by other factors, most obviously the silting up of rivers. The Gulf of Cambay has contracted quite substantially. Once it extended up to where Ahmadabad is located. Vallabhi, now 40 kms inland, was once a riverine port. The ground level at the spot where the Tigris and Euphrates meet has risen 20 feet over the last few millennia.

The next deep structure element in the Indian Ocean which constrained human movement was the monsoon winds. Felipe Fernández-Armesto claims that what really matters in maritime history is wind systems, and especially the difference between monsoonal systems, and those with yearlong prevailing winds. The monsoons follow a quite regular pattern, in the Arabian Sea essentially southwest from May to September, and northeast from November to March. This relatively predictable pattern contrasts strongly with trade wind regions like the Atlantic, where there is a regular pattern of prevailing winds year-round: essentially northeast in the northern hemisphere, southeast in the southern, though both veer more easterly nearer the equator. They are separated, around the equator, by doldrums. North and south of the trades are westerlies, especially strong in the southern hemisphere. While both oceans have predictable winds, more or less, it is clearly much easier to do a round trip in the Indian Ocean than it is in the Atlantic. 'The predictability of a homeward wind made the Indian Ocean the most benign environment in the world for long-range voyaging.'19

In simple terms, the monsoons are generated by the rotation of the earth, and by climate. Heat during the summer warms the continental land mass in the north of the ocean. Hot air rises and creates a low pressure zone at the earth's surface. Moisture-laden air from the sea then moves in to this low pressure area, rises in the upward air current, cools, and so produces clouds and rain. In winter the reverse occurs; as the sea cools more slowly than the land, winds flow out from the land. This pattern is most clearly seen in the Arabian Sea, thanks to the high plateau of Tibet to the north, and warm tropical seas to the south. Another arm of the southwest monsoon avoids southern India and flows directly over the Bay of Bengal to Bengal and

Bangladesh: these areas often get the monsoon before Mumbai. It is also in this area that the monsoons sometimes progress into the notoriously destructive and all too common tropical cyclones, with winds over 120 kph, and sometimes reaching 200 kph with gusts even up to 400 kph.

It was these winds which very largely determined when people could sail where. The monsoon winds were absolutely vital, even if Felipe Fernández-Armesto was putting it a bit strongly when he wrote that

Throughout the age of sail – that is, for almost the whole of history – wind determined what man could do at sea: by comparison, culture, ideas, individual genius or charisma, economic forces and all the other motors of history meant little. In most of our traditional explanations of what has happened in history there is too much hot air and not enough wind. $\underline{20}$

There are some regional specificities and details to consider, these acting to complicate the simple pattern outlined above, and also to put a premium on experience and knowledge. The pattern of winds in the Arabian Sea is familiar enough. Many authorities stress the divide of the Swahili coast at Cape Delgado, which is just south of the mouth of the Ruvuma River, which river forms the boundary today between Tanzania and Mozambique. As a rule of thumb, down to Cape Delgado is one monsoon from Arabia and India, but south of there is two. Here then we see a deep structure element, the monsoons, privileging the northern Swahili coast, for it was more accessible to centres in India and Arabia than was the south.

The northeast monsoon starts in November and one can leave the Arabian coast at this time and reach at least Mogadishu. However, the eastern Arabian sea has violent tropical storms in October and November, so for a voyage from India to the coast it was best to leave in December, by which time the northeast monsoon was well established as far south as Zanzibar: a rapid passage of twenty to twenty-five days could be expected. By March the northeast monsoon was beginning to break up in the south, and by April the prevailing wind was from the southwest. This was the season for sailing from the coast to the north and east. At its height, in June and July, the weather was too stormy, so ships departed either as this monsoon built up in May, or at its tail end in August. An important general point here is that both monsoons prevailed longer the further north on the coast one was. In the far south we are really outside the monsoon system. In particular, the

southwest monsoon is not nearly as strong and predictable as it is further north in the monsoon zone. Up to Mozambique Island there was really no monsoon, and indeed some would claim that the notion of a monsoon system really only applies in the northern hemisphere, or at most to about 10° S.

Moving around to the Red Sea area and southern Arabia, there were other particular things to take account of. An English traveller in 1780 wrote of the pattern in and around the Red Sea:

As different winds prevail on the different sides of the Tropic in the Red Sea, ships may come to Gedda [Jiddah] from opposite points at the same season of the year; those which come from Suez at the above mentioned time [that is, November to January], benefit by the N.W. wind, while those that come from India and Arabia Felix are assisted by the regular S.W. monsoon. The pilgrims... embark at Gedda time enough to avail themselves of the Khumseen [according to Capper this is Arabic for 50, which is the length of time this wind blows] wind, which blows southerly from the end of March to the middle of May, and conveys them in less than a month back again to Suez; the India vessels must also quit Gedda so as to be out of the straits of Babelmandel before the end of August.21

Even today within the Red Sea the monsoons act as a governing factor for traditional navigators, as a modern account of the sea's routes, winds and sailing times makes clear.22

This situation of course pertained even more strongly concerning the traffic between the Red Sea and western India. In the great fifteenth-century trade between Calicut and the Red Sea, ships left Calicut in January, and vessels from the Red Sea arrived there between August and November. The Portuguese described the military significance of this on the Malabar coast. The west coast of India was unnavigable for sailing ships between roughly June and September. In the 1530s the Portuguese were concerned at the way ships from the hostile port of Calicut could sail just before or just after this, before their blockading fleets could arrive. The solution seemed to be to build a fort very near to Calicut. Then they could patrol right up to the end of May, just before navigation became impossible, and resume the blockade early in September as soon as the slackening of the southwest monsoon made navigation possible again.23

As for Gujarat, Terry wrote that the great ship going from Surat to Mocha

beginnes her voyage about the twentieth of March, and finisheth it towards the end of September following. The voyage is but short and might easily bee made in two months; but in the long season of raine, and a little before and after it, the winds are commonly so violent that there is no coming but with great hazard, into the Indian Seas. 24

The matter was most pithily expressed by an Arab author, who wrote that 'He who leaves India on the 100th day [2 March] is a sound man, he who leaves on the 110th will be all right. However, he who leaves on the 120th is stretching the bounds of possibility and he who leaves on the 130th is inexperienced and an ignorant gambler.'25

Moving south to the end of the ocean, the west coast of Malaysia is a lee shore during the southwest monsoon, and at this time it is, just as on the west coast of India, very difficult to sail or land. This monsoon pattern also dictated that a passage from the far west of the ocean, say the Red Sea, to the far east, to Melaka, could not be accomplished in one hit; rather a stop over was necessary, probably in southern India, until the correct monsoon came to continue one's voyage.

Those who ignored the monsoons, or were ignorant of them, came to grief. In 1541 a Portuguese marauding fleet in the Red Sea set sail to return to India in early July. The headstrong captain refused to listen to the advice of his Muslim pilots, who, basing their views on centuries of experience, told him that by leaving at this time he would have no trouble getting to the entrance to the Red Sea, but that once in the Arabian Sea weather of such vileness could be expected that no ship could navigate. And this advice, of course, turned out to be correct. 26 In 1980 Tim Severin, sailing on his Sindbad voyage from the Gulf to China, was becalmed east of Sri Lanka on the replica dhow *Sohar* for thirty-five days in March and April; earlier voyagers could have told him that this would happen. 27

All this said, it is not quite as clockwork like as some accounts claim. For example, Severin picked up the southwest wind that he wanted in early April, which is much earlier than the books allow for. Thor Heyerdahl, in another replica boat, this one made of reeds, passed the Straits of Hurmuz and knew he was now in the monsoon area, which 'blows regularly across the Indian Ocean as if set in motion by clockwork, turning like a pendulum to move in opposite directions every half year.' However, what happened

next showed how variable they can be. In January they picked up a faint south-southwest wind, 'and there was no sign of the strong northeast winter monsoon we could have expected in the middle of January'. The next day, before sunrise, the wind changed from south-southeast to north-northwest — in other words still coming from the wrong direction.28

For monsoon Asia the arrival of the rain-bearing southwest wind is vital, not only for maritime affairs but also for the much more basic matter of growing crops. In India, for example, there are monsoon ragas, they are a theme in miniature painting, and in some of the works of the poet Kalidasa. There are also methods to cope with any variability, again then showing that they are not totally predictable. Andrew Frater wrote engagingly about the problem if they are late, or fail altogether:

The previous year [1986] in Bangalore, for example, the city fathers paid a yogi to pray for rain. Seated on a tigerskin rug beside the Bangalore Water Supply and Sewerage Board guesthouse, the yogi chanted for 2 hours and 4 minutes while his supporters chewed leaves and swallowed burning camphor. Afterwards he was able to inform senior Water Board officials – prostrated before him with offerings of coconuts – that the rain god Varuna, though invisible to the naked eye, now approached them 'like waves of clouds.' The rain fell, all right, and torrentially, but only over neighbouring Cochin.29

The implications of the monsoons are endless, and will underlie most of our discussion of movement by sea before the age of steam. Pirates moved according to the season, leaving the west coast of India for the Bay of Bengal around May each year. They also affect fisheries. Along the southeast Arabian and Somali coasts when the strong winds of the southwest monsoon blow coastal water away from the shore, one gets an upwelling of nutrient rich cold water This may have ten or even twenty times the nutrients of normal surface water. One gets rich blooms of plankton, ideal for fish. However, if this goes on too long the plankton becomes too thick. Lack of oxygen kills the fish. In 1957 such a bloom was estimated to have killed the equivalent of the world's entire fish catch for a year.30

The monsoons are essentially tropical winds. The further south one goes the weaker they are. In the southeast African case, up to Mozambique Island there was really no monsoon. Square rigged ships had to wait for the

occasional cold front from Antarctica, take it until it petered out, and then wait for the next one. And there is the added complication of doldrums around the equator, nowhere near as bad as those in the Atlantic that Coleridge wrote about so powerfully, but still at times a hazard or an inconvenience.

South of the monsoon region lies a belt of southeast trade winds, around 15 to 30° S. These are more or less year-round. Alan Villiers took these once. In the 1930s he was crew on a big four-master barque with thirty sails and 35,000 square feet of canvas. These huge ships were very definitely not the more famous clipper ships, which he dismissed as 'lightly loaded kite-filled clippers'. This ship, and the other Cape Horn ships, he considered as 'Among man's working creations for the carriage of his goods, they alone were supremely beautiful.'31 The cargo was 5,000 tons of Victorian grain. The ship picked up an easterly as they left Melbourne, so the captain decided to go via the Cape of Good Hope rather than the more usual Cape Horn. Past Cape Leeuwin they got the southeast trades in latitudes 25–28° S. These would carry them to the south of Madagascar, where they would pick up the Agulhas current which would take them southeast to the Cape. Once around this they could pick up the southeast trades in the Atlantic. This was a recognised route, being used by some Dutch East India Company ships in the seventeenth and eighteenth centuries, by the *Torrens* when Joseph Conrad was first mate, and once John Galsworthy went that way on the same ship when he was on a health trip.32

Being trades, these are more or less continuous year-round. People from Indonesia could pick them up and reach Madagascar, but getting back in the same latitude was near enough to impossible. To do this they would have had to head further south, to 40 or even 50° S, where 'The wind has a fetch that goes round the world in the southern Indian Ocean, unchecked by any land.'33 This was the place for a wild, fast passage eastwards, where winds could reach 70 knots in the winter. Villiers said that these westerlies in the roaring 40s and fearsome or screeching 50s could blow a square rigged ship from the Cape to Australia, 6,000 miles, in three weeks or less. He did it in the well-named *Joseph Conrad* in the mid 1930s, 'I raced from off Good Hope to off the Leeuwin in less than three weeks, the little ship sometimes almost flying before the shrieking squalls. How the wind and sea could play

down there! This was their home, this wild reach of the Indian Ocean where the wind and sea have almost uninterrupted rule all round the world'.34 This is not for the faint hearted. Kay Cottee, sailing alone around the world some years ago, went below 40° S, and had winds of 40–65 knots with continuous huge southern ocean swells and waves of 18 metres. The strength and predicability of these winds can produce strange results. Alan Villiers tells of one voyage from Melbourne to Bunbury, on the Western Australian coast, a voyage of about 3,000 miles. Once the barque *Inverneil* got out into the Great Australian Bight the captain found the westerlies so strong that he gave up and simply headed east right around Cape Horn, the Cape of Good Hope, and so to Bunbury.35

Apart from winds, there are also broader climatic changes which have substantially affected the Indian Ocean. Even something as apparently fixed and immutable as the sea level can change over time, true very long time, as a result of climatic change. Some 15,000 years ago the sea level was about 100 metres lower than it is at present, and even only 10,000 years ago it was still some 40 metres lower. The Gulf was more like a river than a sea channel. Australia and New Guinea were linked, and the passage from Sundaland to the north was only a short one, though a claim that one could go from one place to the other dryshod is an exaggeration. 36 Between 8,000 and 6,000 years ago the sea rose dramatically, in some places by 100 or even 150 metres. Then change slowed or stopped completely. Since the maximum transgression of the middle of the fifth millennium BCE, sea levels overall have fallen by a global process known as eustatic adjustment, but not by enough to affect history very much, and not uniformly.37 At present we are witnessing what seems to be a new and very major change in sea levels, the first significant one for some 7,000 years. Low-lying Indian Ocean islands are threatened with being submerged as global warming raises sea levels comparatively precipitously.

Rainfall distribution could produce major consequences, another example then of a deep structural element impacting decisively on humans. We know something of the little ice age in the seventeenth century in Europe, but this seems to have been a worldwide event. Rainfall data from Java, based on tree rings in teak forests, show that the first three-quarters of the seventeenth century were very dry. The consequences could include drought, and so famine, as in India in the early 1630s, less flooding in the delta areas and so less fertile soils, and possibly a slight drop in the sea level. 38

Three other deep structure matters affected travel by sea. First are ocean currents, which experienced sailors can 'read' and use to their advantage. Generally speaking, the earth's rotation along with winds means that it is in the western parts of the huge circulating gyres that currents are strongest. In other words, currents are more of a problem, or opportunity, off the East African coast than elsewhere. During the northeast monsoon, November to April, a weak counter-clockwise gyre produces a westward current that travels as fast as one knot. It hits the coast of Somalia and then turns south, and then east between 2 and 10° S. During the time of the southwest monsoon this current reverses, going east, and then north along the coast of Somalia, where it becomes the strong Somali Current. The situation below the monsoon zone is quite different. Here, south of 10° S, is a steady anticyclonic gyre, which means the South Equatorial Current flows west between 10 and 20° S, and divides at Madagascar. One arm goes north of Madagascar, and then south between Madagascar and Africa. The other branch goes south to the east of Madagascar and then curves back to the east towards South India. The first branch is known as the Lagullas or Agulhas current, and Marco Polo claimed that this meant Muslim sailors never went south of Madagascar, or even Zanzibar, because they thought the current meant there was no way to return to the north.39 Lobo, when his ship had trouble getting around the Cape, claimed that if it had kept closer to land in southeast Africa they could have made good progress as the Agulhas current between Madagascar and the East African coast was so strong that it would carry a ship to the south even when the winds were contrary.40 In April 1811 Mrs Graham was on a navy frigate off southeast Africa at about 32° S. It was very stormy:

On the 7th the weather gradually moderated, the sea went down, and we had fine weather; so that though we seemed to have made but little way, the current, which had been checked on the 6th by the contrary wind [that is the southwest monsoon], returning to its usual course with impetuosity, carried us ninety-three miles to the southward of our reckoning in twenty-four hours.41

The combinations further north could produce problems. In 1592 James Lancaster was in Zanzibar, and wanted to go northeast to Kanya Kumari (Cape Comorin) to take prizes. He left in February, but was carried by a very strong current and winds from the northeast and east, towards the north and west, and ended up near Socotra. Then the wind went to northwest and they got around Ceylon in May 1592, just in time to avoid the monsoon from the southwest.42 If one ignored the wind/current combination things could go badly astray. In March 1604 Pedro Teixeira left Hurmuz to sail north to Basra. His ship was foiled by inclement weather, lack of provisions, strong currents, and (predictable for this time of year) contrary winds. After five weeks spent being battered in the Gulf, they returned to Hurmuz.43

Two final deep structure geographical matters could also affect how and when one travelled. Tides can be an extreme hazard in narrow waterways like the Red Sea and Gulf. The effects of the tides in the latter can be felt 100 miles up the Shatt al Arab and into the actual Tigris river.44 In estuaries and deltas this problem is exaggerated. In the Gulf of Cambay the tide purportedly travelled as fast as a man on horseback, and this, combined with silting, led to the decline of the port of Cambay at the head of this gulf. The approach to Kolkata up the Hugli has always presented a daunting challenge to mariners. In northwest Australia the tidal flow is ten metres or more, a hazard for ignorant seafarers and unwary picnickers.

Finally waves. We have described some huge ones in the far south, though some of these may have been exaggerated by excited sailors. Waves higher than 25 feet from trough to crest are rare in any ocean, but storm waves may be twice as high, or even more. Kay Cottee and other voyagers in the Great Southern Ocean experienced these.

Waves beating on a lee shore can make difficult approaches to poor harbours, or coasts where there are no harbours. We pointed out that the west coasts of India and of Malaya, when they are lee shores, are almost unapproachable in a sailing boat. Off the East African coast this is less of a problem, as small ships can go through gaps in the coral reefs which line the coast as far south as Maputo and then approach the land in calm waters. The east coast of India, the Coromandel coast, has a perilous combination

of more or less constant high surf and no harbours of any merit. Mrs Kindersley in Chennai wrote to a friend in June 1765, 'I am detained here by the tremendous surf, which for these two days has been mountains high: and it is extraordinary, that on this coast, even with very little wind, the surf is often so high that no boat dares venture through it; indeed it is always high enough to be frightful.'45

Chapter 2

Humans and the sea

The structural elements of the ocean both facilitated and constrained the circulation of people, who carried with them goods and ideas. When we introduce people it becomes much more difficult to set boundaries. Yet this is essential, for it is people, not water, that created unity and a recognisable Indian Ocean that historians can study. As Braudel wrote of the Mediterranean: 'The different regions of the Mediterranean are connected not by the water, but by the peoples of the sea.' I am concerned now with people around the ocean, especially those in port cities and those strung along the coast outside the cities, with their attitudes to the sea, its role in their lives. There is also the related matter of the land boundaries of the ocean, that is connections not across and beyond the ocean, but inland: a maritime historian has to face the question of how far inland must we go before we can say that the ocean no longer has any influence? We must try to identify people whose social life is importantly tied in to the ocean, that is people of the sea, not just on it: for the latter the sea is optional, nonessential, for the former it is life.2 In all that follows it is important to realise that I am trying to sketch some constant, invariant aspects of the lives of people around and on the sea. But very emphatically this is not a matter of an unchanging East. I have chosen to draw out and examine certain structural elements; the rest of this book will be, I hope, suitably diachronic.

How have historians approached the central matter of the human frontiers of the ocean, with regard to the extent to which one must leave the margin of land and sea and go inland? K.N. Chaudhuri recognises the problem: 'How far the Indian Ocean made its influence felt in the vast sweep of land in the north and the south west, in the direction of Asia and Africa, is a fascinating question'3 and one he does little to resolve. Matvejevic has addressed this matter of land and sea connections, albeit somewhat opaquely. 'The city where I was born is located fifty kilometres from the Adriatic. Thanks to its location and the river that runs through it, it has

taken on certain Mediterranean traits. Slightly further upstream, the Mediterranean traits disperse and the mainland takes over.' He then notes how hard it is to find boundaries. In some areas a mountain cuts off the sea area definitively, but in others it does not, despite analogous obstacles.4

The general problem is to be more precise about the frontiers of the sea. Years ago Braudel wrote poetically about this: 'The circulation of men and of goods, both material and intangible, formed concentric circles round the Mediterranean. We should imagine a hundred frontiers, not one, some political, some economic, and some cultural.' The Mediterranean is a very wide zone: 'We might compare it to an electric or magnetic field, or more simply to a radiant centre whose light grows less as one moves away from it, without one's being able to define the exact boundary between light and shade.'5

None of this is very precise. Yet in fact a certain fuzziness is in order; rather than try to lay down rigid borders where land takes over and the sea disappears, we should accept, and even celebrate, complexity and heterogeneity. We should proceed case by case, asking on each occasion what is the question or problem that concerns us at present, and then extending the range of the data to take account of all the material needed to answer this particular question. If I am looking at a coastal fisher catching for his local community I do not have to go far at all; if I am looking at factory prawn production in Bangladesh for the American market then I must go far and wide; if I want to write about the horses which mounted the Indian Army in the nineteenth century I have to go to New South Wales; if I want to write about where the Indian railways got their sleepers from, I have to go to Australia and also to the Baltic.

To cases, and some examples of very close and intricate connections between land and sea in the Indian Ocean. A young Portuguese scholar recently published an excellent book on the 'Mar de Ceilão,' that is the Gulf of Mannar. In the first part of his book, before the Portuguese arrived, he finds that this defined maritime area made up a 'world'. This world contained interaction in both deep structural and human terms. There were connections made by the sea itself, the coasts of both southeast India and northern Sri Lanka, and the intricate wind and current patterns of this sea,

where two systems met. He also discusses the ports on these coasts, and all the people involved in this sea: maritime people like fishers, pearl divers, traders, sailors, these perhaps being people *of* the sea, and people on the shore, *on* the sea, who seldom went to sea but were intricately connected to it. He deals with the states on the shores, and their efforts, usually futile, to control the sea and its shores and its travellers. Echoing Braudel, this small sea or strait certainly divided the two countries from each other, yet it also connected them and created intricate links between them.

One useful way to conceptualise land/sea relation and connections is Jean-Claude Penrad's useful notion of *ressac*, the three-fold violent movement of the waves, turning back on themselves as they crash against the shore. He uses this image to elucidate the way in which the to-and-fro movements of the Indian Ocean mirror coastal and inland influences which keep coming back at each other just as do waves. 7

What we find on most of the shores of the Indian Ocean for most of history is a peasant agricultural economy inland interacting and connecting with a fishing and trading economy on the coast, yet it is the inland which is economically and socially dominant. Indeed, it could be argued that sea travel is unnatural for our species. Once early life came ashore and became land based, walking became the 'natural' means of getting about, not travelling over water. Over time people developed an extensive network of land communication in Eurasia; these were the essence of communication, but at certain places they intersected with the sea, and land routes were extended or duplicated by sea passages. There were intricate connections between land caravans and sea trade, or today between railways and container ships: indeed the containers are merely moved from a sea form of locomotion to a land one. Also today, sea and air sometimes intersect, so that travellers going on a cruise will often fly to meet their liner in some convenient port. Over all of history land transport and sea transport were often reciprocal, sometimes competing, and sometimes alternatives.

Sea travel has both advantages and problems. It was recognisably more dangerous, both for cargo and people, than land travel, as reflected in insurance rates, which were several times higher for sea travel than for land. Yet before steam as a general rule sea traffic was far more cost effective

than that overland. Chittick claimed that one needs, roughly, the same energy to move 250 kg on wheels on a road, 2,500 on rails, and 25,000 on water. Similarly, it has been calculated that a dhow can travel the same distance as a camel caravan in one-third the time; each boat could carry the equivalent of 1,000 camel loads, and only one dhow crew member was needed for several cargo tons, as compared with two or more men for each ton in a camel caravan. So far so good, yet this refers only to technological factors. There are many others, such as politics, piracy, and the nature of the land terrain as compared with the hazards of the voyage. 'The "lubricant" required to ease as much as possible the "friction" of passage by land is as much a matter of social engineering as of communications technology.' Certainly travel by sea

was 'cheaper' in human terms, and developed much sooner, not just because of energy requirements, but because at sea the incidental hazards of negotiation, protection-money, wilful obstruction and downright violence were so much rarer than in the carrying of goods across region and region, through settlement after settlement, by land. 10

Horden and Purcell note that the relativities vary from place to place. Arguably, because of the land terrain, it is easier to move goods by sea in the Mediterranean area than by land, 11 but this would not necessarily apply in other seas.

Land and sea routes are often reciprocal, but they can also compete, or act as alternatives. When pipe lines are blocked or destroyed today the oil must go by sea. In the sixteenth century the Portuguese made the sea traffic in spices difficult; where it was possible, land routes were used instead. In the early seventeenth century it was cheaper to take goods from northern India to Iran by land, going Agra, Lahore, Kandahar and Isfahan, as compared with the sea/land route of Agra, Surat, Bandar Abbas and Isfahan. Similarly, Agra to Constantinople overland was cheaper than the sea equivalent of either Agra, Surat, Mocha, Constantinople or Agra, Surat, Basra, Constantinople. Clearly the sea/land route was more complicated, and involved much more breaking and repacking of cargo than the land route, but this does not apply to a voyage from, say, Aceh to Surat.

It may also be the case that at least on some routes land travel was faster than that by sea, for example where a powerful state had set up secure roads and a courier system and so less lubrication was needed. Where these were available, mails, commercial advice, and low bulk preciosities would go by land. Finally, we noted that much local traffic in the enclosed Mediterranean sea was chaffering from one shore or port to the next. In the much more expansive Indian Ocean this was also the case, but the peddler had much longer times at sea.

In modern times there are still a variety of factors which determine whether transport be by land or by sea. Passengers on long-distance travels go by air, on shorter distances variously by land or sea. Yet even here there can be variations: if people have a lot of luggage they may prefer to go by sea if ships are still available. Most bulk goods travel by sea when they can, though if a shorter land option is available it will be used, such as the railways across North America, and across India. Few goods go by sea from Mumbai to Kolkata, or New York to San Francisco. Some specialised goods can be moved more easily by land than by sea. The best example is oil, where pipelines can obviate the need for sea passage; yet even here, as we have seen so often in the twentieth century, politics can block a pipe line much more easily than a tanker.

What this rather diffuse discussion is saying is that we need to be amphibious when we write of land and sea, rather like a fish found by Jacques Cousteau in the Seychelles in 1967, which was

a species of amphibious fish, *Periophthalmus koelreuteri* – more commonly, and much less grandly, known as the mudskipper. It is acknowledged to be the most amphibious of all fishes, for it can stay out of water for longer periods than it spends in the water. When on land, the mudskipper carries a supply of water in the gill cavity, and it also gulps air. It is at home on mudflats and among mangrove roots, where it propels itself by 'walking' on its pectoral fins and – in order to move hurriedly – by means of rather spectacular, froglike leaps. In the water, however, the mudskipper swims quite normally. Its diet consists of insects and small crustaceans, in pursuit of which it makes optimum use of its highly functional popeyes to keep watch in every direction. <u>13</u>

Throughout history only a small minority of people have travelled on or depended on the sea. And of those who did, most moved easily between land and sea, and were far from exclusively maritime. Fish demonstrate this matter. For many coastal people fish are not central in their diets, and indeed fisherfolk often will exchange their fish for the preferred land staples

of wheat or meat. In any case, fish are a nutritionally inefficient resource – a kilogram of fish provides only about two-thirds the calories of a kilogram of wheat. And fish also are an aleatory resource, that is depending on chance, as compared with rather more routine land-based food production. Yet fish also can be sent far inland, thanks to another part of the maritime scene. Coastal areas produce salt too, at low tides or when marshes dry up seasonally, and salt is vital in transforming perishables, especially fish, into items which can be exported for long distances and so can enter distant markets.

Port cities have been much discussed. They are the quintessential merging of town and sea, the conduit through which maritime and terrestrial influences mingle and merge. Broeze made some useful comments: to use the term port city

means that the economic, social, political and cultural life of that city is also predominantly determined by and has to be analysed in the light of that port function.... It is above all the active intertwining of all forces from foreland and hinterland through the physical and mediating function of the port which explains the extent, pace and manner of each port city's specific development. 14

Matvejevic put this in more abstract terms: 'Cities with ports differ from city-ports, the former building their piers out of necessity, the latter growing up around them by the nature of things. In the former they are a means and an afterthought; in the latter, starting-point and goal.'15

In discussing the connections and character of port cities, we can use concepts which have long been in use in European studies. A useful one is the geographers' term, 'umland'. This is defined as 'formerly applied in a general way to surroundings, and included in hinterland; now more precisely applied to an area which is culturally, economically and politically related to a particular town or city.'16 It is then the immediate surrounding area, directly connected to the city, frequently because it provides foodstuffs for the city. The umland may be best seen as transitional between the dominant town and the pure countryside.

Port cities have relationships both with the sea and the land. For the former, the term 'foreland' is much used. The foreland is the area of the overseas world with which the port is linked through shipping, trade and passenger

traffic. It is separated from the port city by maritime space. The 'hinterland' radiates out from the port city inland and so begins at the end of the umland. It is the landed area to which the port's imports go, and from which come its exports. To try and be more specific than this is difficult. One obvious point is that while all cities have umland and hinterlands, only port cities also have forelands. 17 All port cities act as hinges, connecting different maritime areas. In the early modern period Hurmuz connected the Gulf with the Arabian Sea; Melaka, and now Singapore, connect two oceans. Many are located on choke points, as with the examples just given.

The relationship of the port city or emporia to the surrounding areas varies greatly. They can be seen as Janus-faced, looking at both hinterland and foreland, and most of them are affected by changes in either. Yet even this is not invariant; all are bound to and affected by the sea, but those which are mere redistribution centres, like again Singapore, and earlier Aden, Melaka, Hurmuz and Mocha, are little affected by events in the hinterland. These are 'entrepot' ports, which live by redistribution. Such ports draw little or nothing from the interior, but rather repackage, break up, and send on foreign goods to a foreign destination. On the other hand those which draw goods from the hinterland will clearly be affected by changes there: Colombo, Surat, Mumbai, Jakarta, Bangkok.

As Broeze implied, location on the shore does not necessarily produce a port city. It is a matter of which function is dominant. Two examples of cities on the shore which are even so not port cities are primate cities, and cities with ports. Kuwait is, and Hong Kong used to be, a primate city, because they are really city states which include a port role among their many functions. So also with Colombo and Bangkok. They dominate in terms of population, industry, politics, culture, or at least high culture, and so while they have docks, they are not really port cities, but rather cities with ports, for they have so many other functions. Contrariwise, today some ports have no cities: they are simply jetties which provide facilities to load cargoes of oil, or iron ore, onto huge carriers or tankers. These purpose built, single function ports are located close to the source of the raw materials, and have no need for cities or people. Examples are Ra's Tannurah for Saudi oil, or Port Hedland and Dampier for iron ore from Australia.

The true port city by definition links very distant maritime spaces, and this is the reason for what is perhaps its most noticeable characteristic. Ports are inclusive, cosmopolitan, while the inland is much less varied, much more exclusive, single faceted rather than diverse. As Murphey noted:

Port functions, more than anything else, make a city cosmopolitan.... A port city is open to the world, or at least to a varied section of it. In it races, cultures, and ideas as well as goods from a variety of places jostle, mix, and enrich each other and the life of the city. The smell of the sea and the harbour, still to be found... in all of them, like the sound of boat whistles or the moving tides, is a symbol of their multiple links with a wider world, samples of which are present in microcosm within their own urban areas. 18

An English writer on the Gulf in the late nineteenth century put it well:

A sea-coast people, looking mainly to foreign lands and the ocean for livelihood and commerce, accustomed to see among them not infrequently men of dress, manners, and religion differing from their own, many of them themselves travellers or voyagers to Basrah, Bagdad, Bahreyn, 'Oman, and some even farther, they are commonly free from that half-wondering, half-suspicious feeling which the sight of a stranger occasions in the isolated desert-girded centre; in short, experience, that best of masters, has gone far to unteach the lessons of ignorance, intolerance, and national aversion. 19

The location of port cities depended on many variables. In the Red Sea Jiddah was both a trade centre and the gateway to the Holy City of Mecca. Aydhab, on the other shore, prospered entirely because of its location. It funnelled African Muslim pilgrims across to Jiddah. As described in 1183, it

has no walls, and most of its houses are booths of reeds. It has, however, some houses, newly-built, of plaster . . . its people, by reason of the pilgrims, enjoy many benefits, especially at the time of their passing through, since for each load of victuals that the pilgrims bring, they receive a fixed food tax.... A further advantage they gain from the pilgrims is in the hiring of their jilab: ships which bring them much profit in conveying the pilgrims to Jiddah and returning them when dispersing after the discharge of their pious duty. There are no people of easy circumstances in 'Aydhab but have a jilabah or two which bring them an ample livelihood. Glory to God who apportions sustenance to all in divers forms. There is no God but He.20

One would assume that ports are on the coast, and indeed this is the case today. Modern port cities have to deal with huge tankers and carriers and container ships, and so must be located on the sea shore, for the ships are

too large to easily travel far up rivers or estuaries, the Rhine and the St Lawrence system notwithstanding. In earlier times when ships were smaller and artificial harbours unknown this was far from the case. Smaller ships could penetrate up rivers and estuaries, thereby getting closer to production centres, and further away from pirates.

Among rivers where important ports were located are the Mekeong system, the Irrawaddy, the Tigris-Euphrates, the Ganga, and the Zambezi system. Malyn Newitt has described this last system. 'The valley of the Zambezi... is in many ways like an extension of the coastal zone, a finger of low veldt extending 300 miles [480 km] into the interior.' In the East African case what we are used to conceptualising as port cities, Kilwa, Sofala, Angoche, and Mombasa, shared very similar roles with Sena and Tete, respectively 260 and 515 km from the sea. 21 The best term for Sena and Tete is 'inland port cities', or maybe 'fluvial ports'.

Important river ports are also to be found in southeast Asia. Thomas Bowrey described several of them. Kedah was on a large river in Malaya, and ships of even 250 tons could get over the bar at the river mouth and right up to the town, 60 miles above the bar. Aceh was two or three miles beyond the bar, and vessels of 60–80 tons could come this far. Bangkok was on the Chao Phraya river, about twenty miles from where this river enters the Gulf of Thailand. In the Middle East, Basra is about 75 miles up the Shatt al Arab from the Gulf.

In India also many ports are far inland on rivers, or at least a considerable distance from the coast. The Jatakas refer to a port near modern Varanasi,22 and at other times Patna and Allahabad have been major ports. Even Surat is three leagues from the sandbar at the mouth of the Tapti River. Deep sea vessels berthed some 10 or 20 miles away at places like Swally Hole, and discharged into lighters. A similar regime occurred at Cambay. On the west coast of India, the city of Cranganore was some fifteen miles inland from the seashore, located on several small rivers. Traders included Syrians, Egyptians, Persians, Arabs, Medes and many other races.23 On the Konkan coast indigenous ports are on navigable estuaries and creeks as these provide shelter against storms, protection from pirates, and possible inland water connections. Dabhol is two miles from the sea, Rajapur is at the head

of a tidal creek and 20 km from the sea. Turning to the Indus river, the first major port there was Daybul, or Dewal, until Lahari Bandar took over in the late twelfth century, but there also was Thatta, which was nearly 200 km up river from the coast and was a major trade centre in the fifteenth to seventeenth centuries at least.

Kolkata provides an excellent case study of the advantages and hazards of an estuarine or deltaic location. On the one hand, land transport in deltaic areas is very difficult. On the other, these lands are very fertile, being constantly replenished by floods. These lands were able to feed the city, and also grow the jute which was for long Kolkata's main export. Yet river navigation can be very difficult indeed, and their courses can move very often. Kolkata is about 80 miles from the sea, and has a tidal range of 22 feet. However, all these problems are outweighed by the advantage of a dense network of waterways giving access to the vast riparian hinterland. Hence through history, and long before Kolkata, there were major ports in this general area.24

In the locations of many of these port cities we have been seeing an interaction of geographical and human matters. Much of the time it is land influences which determine where a port is located. This explains the initially puzzling fact that many fine harbours have no ports, while many ports have miserable or no harbours. Again we have a caution against giving the sea and maritime matters too much agency. Gujarat in the sixteenth century provides an excellent case study. The area was incorporated into the major inland state, the Mughal empire, in 1572, and thus its hinterland was extended, and its ports were made responsive to the needs of the inner core of the empire, that is the Agra–Delhi doab region. The fate of the various ports in the Gulf of Cambay was also changed. Pre conquest, Cambay and its outer ports had been dominant, and the main route to the north went via Rajasthan, where hostile raiders were common and deserts were difficult to cross. After the conquest the main route to the north went east from Gujarat and then north to Agra. Traffic on this route passed through fertile lands, and the area was also much more closely controlled by the Mughal state and hence was safer. As a result Surat rose in importance, and Cambay fell.25

The locations the Portuguese chose for their main ports in the sixteenth century demonstrate the role of political and strategic factors. Many of them seemed on the face of it to be extremely unpromising. Hurmuz had to import all its water, and its climate was extreme. Mozambique Island similarly was extremely hot and unhealthy, and again had no local water. Aden yet again had a shocking climate, and was cut off from the surrounding country by mountains so that it also was nearly an island. Yet these ports fitted in with Portuguese strategic designs, and so they were taken, except Aden, and even prospered for a time.

Some centuries later Aden rose again when inefficient early steam ships needed to take on coal at short intervals. Aden was well located to be one such stop. The needs of the early steam ships influenced other ports also. In the early days when they gobbled up coal, it was of the essence that they load coal quickly, preferably from both sides at once. This meant that good natural harbours for a time did well, such as Galle and Albany. But as steam ships became more efficient and needed less coal, and then ships converted to oil, other political factors came into play and these ports declined.

They were replaced by ports which met different needs, even if they had few natural advantages. Fremantle, located adjacent to the capital of Western Australia, and closer to the areas producing exports and needing imports, was built up at considerable expense in the late nineteenth century, although Albany had by far the better harbour. Yet even after this decision political matters continued to influence what happened. Fremantle was still subject to the vagaries of local politics. Labour relations were usually appalling, leading to frequent strikes. For decades wooden piles were used to build new wharves, even though they rotted very quickly: the state government wanted to protect the local timber industry.

Most of the great ports of British India were located according to economic and political factors, not whether or not they had good harbours. Kolkata is an obvious example, keeping in mind the appalling difficulties of getting from the sea to the docks. Similarly Mumbai had a much better harbour than Surat, yet took over a century to displace it, and really only rose once the British built rails to the interior to provide it with an hinterland. There is an excellent harbour there to be sure, but building the city was a difficult

task. The city was built on what was seven islands, separated at high tides, but joined by mud flats at low tide. Essentially the history of the city was a history of reclamation; the city was invented from marshes, salt flats, isolated islands, even open sea. Indeed one version is that Mumbai was created long ago by coconut palms, which grew on small islands. As they shed leaves into the shallow sea they extended the area of the land. Once the palms were exploited for their coconuts, people began to fertilise them with fish meal. In short, Mumbai is built on coconut leaves and rotten fish.26

Chennai also shows the primacy of politics over geography. For all of the nineteenth century it had no decent harbour and was a very difficult place to load and unload. Nevertheless, it suited the economic and political needs of the British rulers. Mrs Graham in 1810 well described the hazardous nature of getting ashore:

A friend who, from the beach, had seen our ship coming in, obligingly sent the accommodation boat for us, and I soon discovered its use. While I was observing its structure and its rowers, they suddenly set up a song, as they called it, but I do not know that I ever heard so wild and plaintive a cry. We were getting into the surf; the cockswain now stood up, and with his voice and his foot kept time vehemently, while the men worked their oars backwards, till a violent surf came, struck the boat, and carried it along with a frightful violence; then every oar was plied to prevent the wave from taking us back as it receded, and this was repeated five or six times, the song of the boatmen rising and falling with the waves, till we were dashed high and dry upon the beach. 27

Nor was it only the ports of British India. Goa was the central port for the Portuguese from 1510, and it seems that as ships got bigger the estuary of the Mandovi, leading to Panaji and Old Goa, became too dangerous. However, as the capital of the Estado da India, Goa obviously had to be kept. Isabel Burton left a harrowing account of arriving and leaving from this port in April and May 1876. She and her husband Richard were in a steamer coming down from Mumbai. It let them off far off the mouth of the river, and they had eight miles in a row boat to reach Panaji. A little later, getting back on a steamer for Mumbai was an equally dangerous experience. They were told to reach the steamer at midnight. They set off in a large open boat with four rowers:

We rowed down the river and then the bay for three hours against wind and tide, bow on to the heavy rollers, and at last reached the mouth of the bay [that is, the mouth of the Mandovi river], where is the fort. We remained bobbing about in the open sea in the trough of great waves for a considerable time. A violent storm of rain, thunder, and lightning came on . . .

so they went back to the fort to take shelter. On finally hearing the gun of the steamer, they set off again and reached the steamer after an hour, and then had a hazardous time getting on board it.28

A similar impact of colonial needs was seen in East Africa, again then showing the impact of political decisions on the fate of port cities. In earlier times the sheltered river mouths or estuaries were accessible through the coral, as the rivers' discharges affect coral growth and create gaps in the reef for ships to enter. Once steam ships arrived bigger harbours were needed, and Mombasa replaced all the others as only it had a reasonable harbour. But even in Mombasa economic changes dictated changes in the port. The old dhow harbour was incapable of taking larger ships, and was replaced by the new Kilindini harbour on the other side of the island.

Sri Lanka again bears out the dominant influence of land matters over maritime ones, that is that again a good harbour does not necessarily create an important port. At one time Galle was the main port for Sri Lanka, but in the later nineteenth century Colombo was better placed to serve the plantations inland, and so a viable port was created at vast expense. For that matter, Trincomalee had a much better harbour, but its location, in the wrong place to service through-traffic crossing the Indian Ocean, dictated that it never flourish.

The Red Sea also shows how ports are often located on intrinsically hostile shores simply because this location is determined by inland needs. Suez was located to service through-traffic from the Red Sea to the Mediterranean, both before and after the opening of the Suez Canal. Isabel Burton in 1876 wrote that 'Suez is a most inaccessible place, and steamers anchor in the bay, an hour's steam from the town, and much more by sail; if you leave your steamer, and if there is a contrary wind you can never be sure of getting back to it.' Nor did things improve as her ship went down the Red Sea. Jiddah if anything was worse, yet was essential as the

disembarkation place for pilgrims bound for nearby Mecca, and as the hinge connecting the northern and southern reaches of the Red Sea.

I never could have imagined such an approach to any town. For twenty miles it is protected by nature's breakwaters — lines of low, flat reefs, huge slabs of madrepore and coralline that cut like a knife, barely covered, and not visible till you are close upon them; there is no mark or lighthouse, save two little white posts, which you might mistake for a couple of good sized gulls; in and out of these you wind like a serpent; there is barely passage for one ship between them, and no pilot will attempt it, save in broad daylight...

and in fact her ship did collide with another when they finally reached the open roadstead.29

Port cities by definition are located on water, whether it be a river, a lake, an estuary, a delta, a harbour or an open coast. Yet not all maritime people, people *of* the sea, are in port cities. We can now consider the more general matter of coastal or littoral society. One focus here will be fisherfolk, and a discussion of them will segue easily into a concluding description of the most truly maritime people of all, those who actually live on the water.

We can first consider the very narrow strip where the tide has an effect, what Winton called 'the distinct ink line where the water meets the shore – the ever-contested margin of high water.'30 As Lencek put it rather melodramatically: 'it was on the borders of continents and islands that the first living creatures crawled out from the sea to begin their inexorable march toward conquest of terra firma.' Here the ressac notion is even more compelling and appropriate than in our earlier discussions, at least in part because the term itself comes from geography. Again Lencek puts it well: 'one cannot help being intrigued by the face-off between land and water... Here, two titanic forces – one stationary and one in motion – engage in eternal dispute.'31 Dakin says the seashore is 'that narrow strip of land over which the ocean waves and the moon-powered tides are masters – that margin of territory that remains wild despite the proximity of cities or of land surfaces modified by industry.' It is a magic place: 'one of the most delightful and exciting areas of the earth's surface – the seashore, that marginal strip where the sea meets the land, and which is covered and uncovered by the tides. From the dark ocean abysses to the mountain-tops,

from the desert to the luxuriant jungle there is no place with more variety and flexibility of life than where the tides ebb and flow.'32

This narrow strip, the quintessential littoral, is constantly changing. Sand dunes move back and forth, rocks are exposed and then submerged, the sea itself is always changing and moving. The littoral is always fluctuating, moving, changing, advancing and retreating. Standing on the edge of the surf, with your ankles in the water, you are precisely where land and sea meet. How pleasant this is, even more so with rod in hand.

What we have here is ambiguity, lack of definition and boundaries, a zone where land and sea intertwine and merge, really the fungibility of land and sea. Emily Eden looked at the Sunderbunds down from Kolkata in 1837 when she was travelling on a 'flat' or large barge towed by a steamer. The scene she saw was 'a composition of low stunted trees, marsh, tigers and snakes, with a stream that sometimes looks like a very wide lake and then becomes so narrow that the jungle wood scrapes against the sides of the flat'. Then she reflected, very acutely, that 'It looks as if this bit of world had been left unfinished when land and sea were originally parted.'33

We have been describing the beach, the area where land and sea meet. Humans are rather different here than are other species. 'Beaches are beginnings and endings. They are frontiers and boundaries of islands. For some life forms the division between land and sea is not abrupt but for human beings beaches divide the world between here and there, us and them, good and bad, familiar and strange'.34

The question is whether we can see people who live on the littoral as making up a distinctive society, one that can be separated from those further inland. And if so, can we find any commonality in littoral society all around the far flung shores of the Indian Ocean? Does location on the shore transcend differing influences from an inland which is very diverse, both in geographic and cultural terms, so that the shorefolk have more in common with other shorefolk thousands of kilometres away on some other shore of the ocean, than they do with those in their immediate hinterland?

Littoral society is usually considered to be the same as coastal society. Heesterman stresses that it is transitional, permeable: 'The littoral forms a

frontier zone that is not there to separate or enclose, but which rather finds its meaning in its permeability.'35 Braudel wrote evocatively about coastal society, stressing that it was as much land as sea oriented. The life of the coast of the Mediterranean

is linked to the land, its poetry more than half-rural, its sailors may turn peasant with the seasons; it is the sea of vineyards and olive trees just as much as the sea of the long-oared galleys and the roundships of merchants, and its history can no more be separated from that of the lands surrounding it than the clay can be separated from the hands of the potter who shapes it.36

Several modern scholars have ruminated on the nature of the shore folk of the Indian Ocean. Middleton focused on the East African coast.

Part of the coast is the sea: the two cannot be separated. The Swahili are a maritime people and the stretches of lagoon, creek, and open sea beyond the reefs are as much part of their environment as are the coastlands. The sea, rivers, and lagoons are not merely stretches of water but highly productive food resources, divided into territories that are owned by families and protected by spirits just as are stretches of land. The Swahili use the sea as though it were a network of roads. 37

We may note here that the very term 'Swahili' means 'shore folk', those who live on the edge of the ocean. As Pouwels has it, Swahili culture was 'a child of its human and physical environment, being neither wholly African nor "Arab," but distinctly "coastal", the whole being greater than the sum of its parts.'38

Islands are perhaps where we are most likely to find littoral societies, for one would expect to find here more concentrated mixings from various cultural influences. Indeed, on smaller ones there would be nothing but coastal people, for the sea would permeate the whole area. The Seychelles, the Andamans and Nicobar Islands, tiny fragments of land in the ocean, are purely littoral. Similarly, islands in the rivers can be seen as making up small littoral societies all their own, even far 'inland'. The Zambezi system had many islands, as also did other river basins and deltas: the Hugli, the Ganga, the Tigris-Euphrates, the Irrawaddy and so on.

Despite all these general statements, the precise elements of commonality of littoral society have not yet been adequately worked out. We could look at food, obviously largely derived from the sea, even if some fisherfolk prefer to trade some of their catch for cereals. Houses are usually different

from those inland. As one would expect, locally available materials are usually employed. For much of the coast this means that palm trees are used to provide a housing structure, and a thatched roof. In some areas however coral is available; on the Swahili coast it is widely employed as a building material. Jacques Cousteau in fact found it to be of universal utility in the Maldives. It was used to construct the landing strip and the houses, and even the beaches were pulverised coral, not sand. 'Everywhere we saw tiny cemeteries under palm clusters. The tombs themselves, crosses and all, were made of coral. Everything here is bound up with the sea, even life and death.'39

The whole rhythm of coastal life is geared to the monsoons. Ship styles historically were relatively uniform, as we will describe in detail in the next chapter. Certainly, as we have noted, littoral society is much more cosmopolitan than are parochial inland people for, at the great ports which constitute the nodes of the littoral, traders and travellers from all over the ocean, and far beyond, were to be found. This characteristic of cosmopolitanism produced another element of unity. Certain languages achieved wide currency, such as Arabic in the earlier centuries. There are some 5,000 words of Arabic influence in Malay, and more than that in Swahili, and about 80 per cent of these are the same, that is in Malay and Swahili, so that we have a 'corpus of travelling Arabic words'.40 Freeman-Grenville tried to find links and commonalties between Swahili and the language of the Sidis of Sind.41 Later a sort of nautical Portuguese, and today some variant of English, have achieved a similar quasi-universal status.

Folk religion on the littoral similarly is to be distinguished from inland manifestations. The concerns of coastal people were usually quite different from those of peasants and pastoralists inland. On the coast religion had to do with customs to ensure safe voyages, or a favourable monsoon. Particular gods were propitiated for these purposes. Specifically maritime ceremonies marked the beginning and end of voyages.

A particular west coast Indian rite celebrates the end of the southwest monsoon and so the beginning of the sailing year. The always quotable and always acerbic Dr John Fryer noted this in Mumbai in the 1670s: 'After this Full Moon, the Banyans, assisted by their Brachmins, go in Procession to the Sea-shore, and offer Cocoe Nuts to Neptune, that he would restore them their Mare Pacificum; when they make Preparations to go to Sea, and about their Business of Trade.'42 Ovington in Mumbai at about the same time wrote that

the Bannians endeavour to appease the incensed Ocean by offerings to its inraged Waves, and in great plenty throw their gilded Coco-nuts into the Sea to pacify its storms and Fury, and render it peaceable and calm. And after these Ceremonious Oblations are past, the Oraculous Bramins declare safety to the Ships that will venture upon the Ocean, before which not one of them will offer to weigh Anchor

and similarly in the Maldives, in Goa and in Mumbai.43

Dr Varadarajan's ethnographic work in Gujarat has found rather similar things happening today, though based on very old traditions. Her account makes clear that littoral location, and occupation, transcend religion. On the 'narial prunima' day both Hindus and Muslims take part in ceremonies when the forces governing the sea are worshipped, and boats are symbolically taken out to mark the beginning of the season. Rites are conducted by the community rather than the temple priest. 'As the ritual is so intimately connected with their vocational life, all seafaring folk come together to celebrate this day coalescing religious heterogeneity through group participation.' The god Darya Lall is worshipped under various names by different communities, both Muslim and Hindu. His protection is invoked to avoid peril at sea, but formal thanksgiving occurs on safe return to land. Hindus observe vows on the second day of the bright half of every month by passing water through a sieve. Muslims wade into the sea with votive offerings on any convenient day, and allow the sea to carry their gifts. The third important saint or god is Khizr Pir, the immortal one, invoked in times of distress at sea by both Muslims and Hindus. At Porbander there is a shrine dedicated to him, and at the start of the season boats salute this shrine as they leave. There is also a saint called Shah Murad Bukhari. When his grave covers are replaced they make pennants from the discarded cloth. These relics are hoisted in times of danger at sea so that the saint will save them: again both Muslims and Hindus do this. In general 'occupational hazards to which they are exposed cut across religious differences.'44

Setting out and returning are obvious times to celebrate and propitiate. Qaisar found this in the seventeenth century. When a ship departed those on board may sip holy water, and offer curd, milk, rice, coconuts and garlands to the sea. Seafarers also printed auspicious palm prints over the vessels, especially on the seams. Sometimes an oculus was painted on the ship's bows, this being based on a very ancient Egyptian practice. Carrying bodies was considered to bring bad luck, so they had to be hidden. He also notes the importance of Khwaja Khizr, the guardian of the sea, whom we just met as the present day Khizr Pir. He could be relied on to answer an appeal for help from a traveller in distress. He is the patron saint of sailors, is omnipresent and has eternal life.45

In Goa in the late sixteenth century we again find specific rites geared to the needs of those who go to sea. 'When they will make a voyage to the sea, they use at the least fourteene days before [they enter into their ships] to make so great a noyse with sounding of Trumpets, and to make fiers, that it may be heard both by night and day; the ship being hanged about with flaggers wherewith [they say] they feast their Pagode, that they may have a good voyage. The like do they at their returne for a thanksgiving fourteen days long'.46 In Goa today fishing boats are named after saints, and the owners and crew make offerings to the relevant saint on his or her feast day.

However this in turn raises other questions and problems: remembering our past distinction between people *on* the sea and people *of* the sea, can we assume that littoral people are necessarily *of* the sea? We can look particularly at fisherfolk. 'For the fisherman and the sailor, water is life and death, sustenance and menace; it eats away the wood of the ship just as it does the life of a man who ventures out on the treacherous, bitter sea, putting his trust in the fragile board his foot stands on'.47

Fisherfolk are different from peasants. Their catches usually depend on chance, not on wise husbandry. Certainly fishing is more dangerous than cultivating land, but we should remember that the further out one fishes the more dangerous it gets. In far offshore fishing it is not so much individualism which is created, but rather a necessary stress on cooperation. While it is true that gender divisions are more important than in peasant societies, this also is significant in terms of our current discussion of land

and sea. Essentially a fishing family links land and sea, with the woman on the former, the man on the latter. Indeed, women may not only do the cleaning and processing and marketing, they may well cultivate land as well. The fishing family, whether extended or nuclear, has the possibility of exploiting both land and sea, while peasants have only the former option. Yet this exploitation differs dramatically between land and sea, for unlike agriculture fishing is a purely exploitative activity; as Dakin says, 'man is always taking away life from the sea — he neither sows nor fertilises the waters; only reaps.'48

All this said, and while there is no doubt that fisherfolk are *of* the sea, not *on* it, the fact remains that they live as much on land as on sea, and fishing activities are crucially dependent on land matters: middle men, markets, processing plants. If we were to try to construct a continuum of dependence on the sea, we would have peasants and pastoralists at one end, then maybe various gradations of the inhabitants of the port cities, then fisherfolk, and finally the truly and purely maritime people, to whom we now turn. We have frequently stressed the dominance of land over sea, but just for a while we can turn to people who are by definition exceptional. These people are people *of* the sea, and unlike all others on the shore they are *not* amphibious: their lives are spent on or in the water.

Some such people are simply sailors who sail for a long time, so long that they may lose their land ties. We have an account of the merchants of the great port of Siraf around 1000. Some of them travelled so much that they were away at sea all their lives. The contemporary account goes on:

I was told of one man of Siraf who was so accustomed to the sea that for nearly forty years he did not leave his ship. When he came to land he sent his associates ashore to look after his business in all the towns, and he crossed over from his boat to another, when the vessel was damaged and needed to be repaired.

Yet such people must have been uncommon. For most sailors in the Indian Ocean the monsoon regime meant that there was considerable 'down time', as they waited for the change in the winds, and this time would be spent in port.

The best studied truly aquatic people today are the famous Marsh Arabs of the Tigris-Euphrates delta, occupying the vast palustral triangle between An-Nasiriyah, Al-'Amarah, and Basra. The classic account is by the colourful and somewhat anachronistic Wilfred Thesiger. He lived in the marshes off and on from 1951 to 1958, and loved it despite the mosquitos, snakes, very large wild pigs (some the size of a donkey, weighing over 300 lbs), fleas, and flooding each year. The area was also riddled with disease: dysentery was endemic, also bilharzia, yaws, hookworm, eye infections, and tuberculosis. He spent so much time with them because

They were cheerful and friendly and I liked the look of them. Their way of life, as yet little affected by the outside world, was unique and the Marshes themselves were beautiful. Here, thank God, was no sign of that drab modernity which, in its uniform of second-hand European clothes, was spreading like a blight across the rest of Iraq. 50

This was a totally aquatic society. 'The ground looked solid but felt very soggy. Actually it consisted of a layer of roots and decomposed vegetation floating on the surface.' Some of the islands were only a few square yards, others an acre, some tethered, some floating about.51 The houses were built on these reed platforms floating on the water, and all transport was in boats, usually very small. As Thor Heyerdahl noted, 'A Marsh Arab can rarely walk more than a couple of steps before he has to enter his canoe.'52 When it floods they just add a few more layers of reeds on the floors of their houses so they can keep dry. Once Thesiger was treating patients, and there were so many of them that 'the weight of my patients submerged the floor. I finished treating them ankle-deep in water. My host assured me that it did not matter, but nevertheless he seemed relieved when I moved on.'53

This way of life goes back perhaps 5,000 years. Yet even when Thesiger was there in the 1950s the oil boom in Iraq had begun, and many Madan, as the Marsh Arabs call themselves, had moved off to Basra and Baghdad in search of fortune. As he noted: 'Soon the marshes will probably be drained; when this happens, a way of life that has lasted for thousands of years will disappear.'54 Gavin Young was a bit of a protégé of Thesiger, and first visited the marshes with him. He spent a considerable time there in the early 1970s, but by then things had already changed dramatically. There was a tourist invasion, with guests living in floating house boats or

government guest houses or tourist bungalows, and people got about in motor launches rather than canoes. 55 Much marsh land was being reclaimed for rice cultivation, and there were even then schemes to control the flooding of the Tigris and Euphrates and so reduce further the size of the marshes, or even drain them completely. Since Young's time this process has continued; Saddam Hussein may have the political aim of ending the marsh sanctuary of his Shia political opponents, but in any case the marshes would be doomed regardless of who ruled in Baghdad.

Tourists have invaded other aquatic areas also, such as the backwaters of Kerala in southwest India. These lie behind a coastal sand spit, and again their inhabitants can be seen as moving beyond amphibious to aquatic. The area consists of narrow strips of land, with flooded rice paddies all around. The men fish: indeed when Frater was travelling along them in 1987 he was surprised to see heads sticking up out of the water. These were the bottom walkers, who trawl by hand, walking along the bottom of the shallow waters. The women work in the neighbouring paddy fields, and indeed many of the paddy fields are reclaimed to make islands. Some islands are substantial with stone levees or dykes, locally called bands. Others are less substantial, having only earthen bands which can collapse, especially during the monsoon. Transport and commerce, and getting to school, is by water, mostly in tiny dugouts.

A Dutchman in 1689 left us an enchanting picture of this society:

So pleasing that it is really worth seeing how nicely the embankment on all sides has been divided into small and some large village-plots by trees and houses, and how everywhere around these villages there are beautiful large and small islands, planted with grain, as far as the eye can gaze. Everything looks so pretty and green that every view pleases the heart and every time, through the beautiful tincture and perspective, the sight is equally enjoyable. And not least pleasing are the many small dikes, galley and other creeks, the cattle grazing here and there, fences of long reed around the houses and mats very finely braided. Many different kind of crafts from one piece of wood float to and fro, some only one fathom long, in which men are standing upright, carrying some goods. 57

Today many of the rice boats which for centuries have moved large cargoes of rice around the region have been converted into luxury house boats for western tourists and Indian yuppies and dot.com millionaires.

In other places we find floating markets, extremely venerable, yet today also tourist attractions. The Bangkok one is a compulsory sight for any visitor. Long before this, in 1833 an American traveller had some perceptive comments to make. He had come up river from the mouth, and reached the town:

We now threaded our way among junks, boats and floating houses, jumbled together in glorious confusion, and totally concealing the banks from our view. Hundreds of small canoes, some not larger than clothes-baskets, were passing to and fro, many of them containing talapoins or priests, paddling lazily from house to house, collecting presents of provisions. The occupants of the floating houses were taking down the shutters which formed the fronts, exposing their wares for sale: printed calicoes, paper-umbrellas, sweet-meats, fruits, pots, pans, etc being placed in situations the best calculated to attract the notice of the passers-by. This occupation was carried on entirely by the women, the men being either seated on the platforms smoking their segars, or making preparations to take a cruise in their canoes.

Later he noted that:

The best shops are built on wooden floats on the river; indeed when the waters are out, they flood the whole town, the only communication between the different dwellings being by means of boats. At this period of the year, when the river becomes swelled by the rains, whole streets of floating houses, together with their inhabitants, sometimes break adrift from their moorings, and are carried down the river, to the utter confusion of the shipping. These floating streets, nevertheless, possess their advantages. A troublesome neighbour may be ejected, house, family, pots and pans, and all, and sent floating away to find another site for his habitation. A tradesman, too, if he finds an opposition shop taking away his custom, can remove to another spot with very little difficulty. 58

It is tempting to see these people as typical maritime folk, but better simply to locate them at one end of a continuum which goes from totally landed to totally seabound. And indeed the careful reader will have noticed that not even all these people are purely aquatic. Most people located in the countries around the Indian Ocean, even on its shores, were not and are not in any true sense maritime people. Location is not the only signifier; one can live with the sound of surf in one's ears and not be maritime, one can even travel by water and still not be aquatic. Take the priests at the Vivekenanda temple on an island just off Kanya Kumari in the extreme southern tip of India. They travel frequently by water to the mainland, but

are in no sense maritime. Nor are the pilgrims that the priests serve. How complicated it can get: what, for example, of female fisherfolk, who never go to sea yet exist to service those who do and to market their product?

Indeed, one could take this further and claim that by and large events at sea are not very significant. Braudel wrote of the famous battle of Lepanto in 1571: 'All one can say is that after all Lepanto was only a naval victory and that in this maritime world surrounded and barred by land-masses, such an encounter could not destroy Turkey's roots, which went deep into the continental interior.'59 Battles at sea are far less sanguinary and destructive than those on land. Armies on the land kill many people including noncombatants, especially in this century, and destroy crops and infrastructure. All naval battles do is kill a few sailors. It has been claimed that the decline of landed empires affects port cities and sea trade detrimentally, something we will have to examine later. But no one would claim that losses at sea affect production on the land. Maritime empires can take part in, and even try to control, trade, but land empires can control production — a very important difference.

Normative statements in both Hindu and Muslim cultures reflect a profound hostility to or distrust of the sea. The Manusmriti imposes penalties for anyone who would dare to cross the Black Water. While it is true that some Hindus travelled by sea anyway, it is obviously significant that Indian coastal traders and fisherfolk are usually from lower castes. As for Muslims, aphorisms abound. 'Merchants who travel by sea are like silly worms clinging to logs.' 'Wars by sea are merchants' affairs, and of no concern to the prestige of kings.' And the Caliph Umar was advised that

The sea is a boundless expanse, whereon great ships look tiny specks; nought but the heavens above and waters beneath; when calm, the sailor's heart is broken; when tempestuous, his senses reel. Trust it little, fear it much. Man at sea is an insect on a splinter, now engulfed, now scared to death. 60

Yet Muslims overwhelmingly ignored these warnings and played a dominant role in Indian Ocean trade for a millennium.

An experienced captain once said 'I love going to sea. I do not love the sea out there. That is not my friend. That is my absolute 24-hour-a-day sworn enemy.'61 Dr Johnson predictably had something oratorical to say on the

matter: 'Why, sir, no man will be a sailor, who has contrivance enough to get himself into a jail; for, being in a ship is being in a jail, with the chance of being drowned.'62 However, Dr Johnson was a rare man among the English, for he was a landlubber. He was born in Lichfield, one of the few cities in England more than 100 miles by road from the coast and was 52 before he saw the sea. Most Englishmen did have some sea knowledge or even experience, as Conrad pointed out as he began his story *Youth*, 'This could have occurred nowhere but in England, where men and sea interpenetrate, so to speak – the sea entering into the life of most men, and the men knowing something or everything about the sea, in the way of amusement, of travel, or of bread-winning.'63

More soberly, we can ask how many people actually make a living from the sea, or work in occupations connected with it. This could become a very large discussion indeed, but I will merely point out that the Indian censuses of 1891, and 1901 demonstrate that the numbers engaged in anything to do with the sea are infinitesimal as compared with agriculture. In 1891 61 per cent of the Indian population were identified as being in 'Pasture and Agriculture', while the total from even a very generously defined maritime category is still well under 1 per cent. The figures for 1901 are similar.

As is only appropriate, we will give Braudel the last word. He ended his classic work with these words:

the Mediterranean in the sixteenth century was overwhelmingly a world of peasants, of tenant farmers and landowners: crops and harvest were the vital matters of this world and anything else was superstructure, the result of accumulation and of unnatural diversion towards the towns. Peasants and crops, in other words food supplies and the size of the population, silently determined the destiny of the age. In both the long and the short term, agricultural life was all-important. Could it support the burden of increasing population and the luxury of the urban civilization so dazzling that it has blinded us to other things? For each succeeding generation this was the pressing problem of every day. Beside it, the rest seems to dwindle into insignificance. 64

Chapter 3

The beginning of the ocean

Most human cultures have myths associated with the beginning of life, such as those found in Sumerian, Hindu and Buddhist literature (we will discuss Islam in the next chapter). The Sumerians believed that the founders came to the Tigris-Euphrates valley from the sea to the south. Sea travel was intricately tied in with the gods, especially Utu, the Sumerian sun god: 'The ship bent on honest pursuits sails off with the wind, Utu finds honest ports for it. The ship bent on evil sails off with the wind, he will run it aground on the beaches.' In Buddhist cosmology four of the land masses which supported human habitation were located in the Great Ocean, though some other Buddhists, just like the Greeks, thought there were several seas. The Buddha, however, was disinclined to speculate on how the world was created, or how long it would last.

Hindu thought similarly was less certain about creation than was Judeo-Christian doctrine. It tended to be less concerned with the sea, reflecting no doubt the land orientation of the Aryans. In the famous 'Hymn of the Primeval Man,' an early Hindu creation myth from the early first millennium BCE which is part of the Brahmanas, Primeval Man, that is Prajapati, was dismembered to make the world. The four varnas came from parts of his body, the moon, sun and wind from other parts, and air, sky, and earth from others again. What is significant is that there is no mention of the sea. However, in later Hinduism there are mentions of the universal flood which destroyed the world, and also of the cosmic ocean.2 In the Puranas the origin of life is traced to the sea, and the sea is seen as a store of riches such as diamonds, pearls and rubies. Life's journey was like a journey across the ocean, necessary but full of trials and travails. Traditionally there are seven seas, which are joined but have distinctive qualities. They are generally seen as dangerous and unknowable: one who crossed the sea was often called a yati, that is one who has renounced the world and is prepared to lose one's life.3

The central Hindu god Vishnu has several associations with the sea. He is often depicted as rising from the sea. In temple images he may appear reclining on the coils of the serpent Shesa, asleep on the cosmic ocean during the times between the periodic annihilation and renewal of the world. He also played a central role in one of the recurrent central events in Hindu mythology, the continuing struggle between the gods and the demons. On one such occasion the Indian gods had lost much of their power. They gathered on Mount Meru, the navel of the world, to discuss how to gain the amrita, or elixir of immortality, which was hidden deep in the ocean. At Vishnu's suggestion they decided to churn it out. As they did this, fourteen precious things come out, including the sun, moon, Vishnu's wife Lakshmi, Chandra the moon god, and Varuna, the goddess of wine.4 Dhanvantari, the physician of the gods, rose up out of the waters carrying in his hands the supreme treasure, the amrita. After various false starts, it was finally consumed by the gods, who consequently were restored in strength.

Later Hindu thought, as in the Laws of Manu, and the Dharmasastra, takes a much less sanguine view of the ocean. It is called the kala pani, the Black Water, which it is forbidden to cross for fear of suffering serious pollution in caste terms. Many writers have claimed that this meant that Hindus are forbidden to travel by sea. However, the Sastras are really much more flexible than this, and these prohibitions are to be seen as precepts rather than strict rules. This is demonstrated by the way Hindus have crossed the ocean since time immemorial, even if the sea does not play a major role in Hindu thought. Lower caste people especially were relegated to occupations which higher castes found polluting, so that coastal trade and fishing was typically, then and now, done by folk very low in the hierarchy.

Some recent Indian surveys have strained to endow India with a major maritime past, and to find the sea and ships occupying a central role in the early Indian literature. It has been claimed that the very earliest, the *Rig Veda*, shows Indians had a proud maritime past. Many references, some of them apparently rather ambiguous, are found in such other texts as the *Ramayana*, *Arthasastra* and *Mahabharata*. While by no means questioning the bona fides of these enthusiasts, the fact is that in terms of mythology Indian examples pay scant attention to the sea.

How did the Indian Ocean reach the shape which we described in Chapter 1? About 250 million years ago a rift opened in the one existing continent, Pangaea, creating Laurasia to the north and Gondwanaland to the south. Some 100 million years ago Gondwanaland in turn broke up to form South America, Africa, India, Antarctica and Australia, thus opening a connection between the early Indian Ocean and the early south Atlantic Ocean. The latter two drifted apart about 65 million years ago. The Indian Ocean was close to its present form from this time. However, even once a water mass recognisable as the Indian Ocean had appeared, there were and still are variations. River deltas, those of the Zambezi, the Tigris-Euphrates, the Ganga, the Irrawaddy, and the Mekeong, are notoriously unstable areas. About 15,000 years ago sea levels were 100 metres or more lower than today. Today global warming is causing a threateningly rapid rise in sea levels.

Humans first went to sea in the Indian Ocean. Recent archaeological work, which supports the Out of Africa theory of human origins, found a coastal settlement on the Red Sea coast of Eritrea where people were using boats at least 125,000 years ago. These humans ate from the sea: oysters and shellfish.8 It seems that at the other end of the ocean there also were very early voyages, which led to the peopling of Australia and New Guinea. This was a momentous event, as for the first time humans settled land outside of the Afro-Eurasian landmass, moving to the connected area which is now Australia and New Guinea, called Sahul. To reach here, even when sea levels were much lower than today, required that between 60,000 and 40,000 years ago the ancestors of today's Melanesians and Australian Aborigines leave Sundaland and cross open straits at least 65 km wide, and at other periods up to 150 km wide. 9 Much later, there is evidence of foraging subsistence people around the northern shores of the ocean from 7000 BCE. There was early exchange also: for example, shell beads found in northern Syria which date from the fifth millennium BCE must have come from the Indian Ocean region via the Gulf. 10

Given this early association with the sea, it is quite fitting that the closest living relative of the long-extinct fish, the rhipidistia, which is the ancestor of all land vertebrate animals, was found by Jacques Cousteau off the Comoro Islands. This is the so-called 'living fossil' fish, the coelacanth,

which is the world's oldest known unchanged fish species, with a physique identical to fossil coelacanths in rocks dating back 350 million years. These antique fish average 100 lbs, and are caught in depths from 500 to 1300 feet. It is a powerful carnivore with hard scales and limb-like fins. They were considered extinct, but then one was caught off the east coast of Africa, and later it turned out the Comoro Islanders fished them regularly.11

Archaeology has told us a little about the earliest boats in the Indian Ocean. In this and the next chapter we are dealing mostly with ships north of about 10° S: only when Europeans opened the Cape route, and later a direct passage from the Cape to Western Australia and then up to Indonesia, did the lower half of the ocean see much traffic. The earliest boats were canoes made of reeds, though not the papyrus of Egypt, and are still to be found in the marsh areas of the Tigris-Euphrates delta. In this area they are made of the berdi reed. Reeds are bundled together, and then these bundles are tied together to make a ship. There is some debate over whether or not they were coated with asphalt to make them more water tight. Many reed boats got their buoyancy only from the sum total of the buoyancy of the materials they were made of, and so usually sat very low in the water. Thor Heyerdahl built a large one, some 60 feet long, and taking a crew of about twelve. He found it laborious indeed to sail.12

It is a long step from reed boats to wooden boats built to be watertight, gaining their buoyancy from enclosed air. Wooden boats go back very far, to the time of the Indus Valley civilisation some 5,000 years ago and no doubt much earlier again. It seems that while the Indus Valley civilisation had wooden boats, the Sumerians had only reed ones, which then would be inherently inferior. With the coming of Islam we have much more detailed accounts of ship construction, types, navigation and so on. For the period before this we work mostly on the assumption that long distance ships were of the same type as the famous dhows, which we will describe in detail in the next chapter: that is, they used no nails, were constructed of Indian teak, and by using a lateen sail could sail close into the wind.

We can assume that the primitive coastal craft still found around the shores of the ocean go back to far antiquity. An early European account by Sir Thomas Bowrey gives a vivid account of millennium-old fishing craft, the mukkuvar: they

are built very Sleight, haveinge no timbers in them, Save thafts [that is, thwarts] to hold their Sides togeather. Theire planke are very broad and thinne, Sowed togeather with Cayre, beinge flatt bottomed and every way much deformed.... They are Soe Sleightly built for conveniencies sake, and realy are most proper for this Coast; for, all along the Shore, the Sea runneth high and breaketh, to which they doe buckle and alsoe to the ground when they Strike. They are called Massoolas. . . . When they goe on fishinge, they are ready with very Small Ones of the like kind, that will carry but 4, 3, 2, or one man onely, and upon these Sad things, they will boldly adventure [out] of sight of the Shore, but indeed they Swimme (in general) as naturaly as Spanyall dogs. I have often Seen them one leage or more off Shore, when the Westerly winds have blowne very hard, which is right off, soe that they cold by noe means paddle any nearer in, and they have made Sleight of it, onely let fall theire line with a Stone fast thereto, and let the Cattaraman ride by it, (for such are theire Anchors) and they Swimme on Shore both against wind and Sea.

Bowrey then goes on to tell the story of a man who got far out to sea, and took four days to swim and drift back to shore. 14

In more recent times such boats were also used as lighters, tending larger ships held off the coast by the high surf of the area. Mrs Graham in 1810 described them: 'The boats used for crossing the surf are large and light, made of very thin planks sewed together, with straw in the seams, for caulking would make them too stiff, and the great object is, that they should be flexible, and give to the water like leather, otherwise they would be dashed to pieces.' She also described the ubiquitous catamarans of the southeast Indian coast. In 1810 she

walked to the beach to see the catamarans of this coast; they are formed of two light logs of wood lashed together, with a small piece inserted between them at one end, to serve as a stem-piece; they are always unlashed, and laid to dry in the sun when they come out of the water, as dryness is essential to their lightness and buoyancy; when ready for the water, they hold two men with their paddles, who launch themselves through the surf to fish....15

A brief account from Sumatra in the early fifteenth century gives the same impression: 'The lower classes make a living by catching fish with nets. In the morning they take their boats which are made from single tree-trunks,

raise the sails, and go out to sea; in the evening, they return with the boats.'16

The rise of early civilisations in the Tigris-Euphrates area, and in northwest India, that is those of Mesopotamia and the Indus Valley, had profound effects for trade, including that by sea. We can now begin to write about relatively routine and organised trade using the Indian Ocean as a highway. Indeed, it is clear that the main economic connections between these two civilisations was by sea, for the land route was and is formidably difficult. For the first time coastal dwellers lived in cities where there was more differentiation amongst the inhabitants, and hence a need for both practical and luxury goods from far afield. There was trade with the other of the three earliest civilisations, in Egypt, from both these Indian Ocean ones, but our main concern is with exchange between the two, which may have begun as early as 3000 BCE. What we know about the Indus Valley Civilisation is based almost entirely on archaeological investigations, given that the script, if this is what the hieroglyphics are, has yet to be deciphered. In the case of Sumer, the famous tablets provide some good information.

Now that we have some details we find the first occurrence of an irony, one which continues through most of the history of the Indian Ocean. The core or focus or fulcrum or centre of gravity of Indian Ocean trade and travel was always India, as we will have occasion to notice frequently as we progress. Yet through most of history maritime trade was, for India, optional rather than necessary, for the subcontinent was until very recent times self-sufficient in all basic needs. Trade by sea then was discretionary, and this in turn may explain why the sea has always been on the periphery of Indian consciousness, at least as compared with several other areas in the Indian Ocean, let alone such nautical places as England or coastal Europe in general.

The main port associated with the Indus Valley Civilisation was Lothal, in the Gulf of Cambay, though there were others in the Rann of Kutch and in Oman which also connected India with Dilmun, the famed port at Bahrain in the Gulf, and with Mesopotamia, especially the city of Ur. 17 Civilisation in Mesopotamia was located on a delta. The area had no rocks or minerals or even suitable timber. Consequently trade was much more essential for

Mesopotamia than it was for the Indus Valley Civilisation. The latter had all the raw materials it needed, so that for them trade was discretionary. It was undertaken in part to get new markets, and in part to bring back exotica. Mesopotamia imported rarities from India, and also necessities, such as Indian teak. Other goods originating from India have been found in the royal cemetery of Ur dating from 2600–2500 BCE, such as carnelian beads. Later Sargon of Akkad boasted of trade with Dilmun (Bahrain), Magan (Makran and Oman) and Meluhha (Indus Valley Civilisation area). Goods passing from the Indus Valley Civilisation to Mesopotamia at this time included hard woods, tin or lead, copper, gold, silver, carnelian, shell, pearls and ivory, and animals such as red dogs, cats, peacocks and monkeys. Indus Valley Civilisation weights and seals have been found in Mesopotamia. 18

Other evidence also points to sea trade being much more central for the cities in the Tigris-Euphrates valley than for the Indus Valley Civilisation. Sumerian tables not only mention trade goods, but also speak of other maritime matters, such as kings and merchants going overseas, lists of cargoes, and even shipwrecks and other maritime disasters. Even if we cannot read the Indus Valley script, we can assume that its leaders, whoever they may have been, showed much less concern with the sea.

The fragmentary evidence outlined here deals mostly with long-distance, glamorous, trade. Yet throughout this book we will have to remember that unsung, and unrecorded, coastal trade was also present, indeed most of the time was far more important than the long-distance trade catering to the needs of the elite which is privileged in almost all records. Trade in necessities is hard to document, for such staples as foodstuffs and cloths leave no archaeological trace. Yet it is clear that there was quite extensive sea trade within the Indus Valley Civilisation, from for example the area at the mouth of the Indus river to Lothal. Romila Thapar, writing of trade between India and Mesopotamia from 3000 BCE, pointed out that many small ships 'tramped from port to port and were travelling bazaars, largely covering the more confined circuits. Such a low profile trade continues to the present.'19 This coastal trade occurred all around the margins of the Indian Ocean. For example, there were contacts along the Swahili coast, between Somalia and the Mozambique channel, well back in the first millennium BCE. In this period, and indeed throughout history, the two terms which best describe Indian Ocean trade are periplus, which means a coastal voyage, and cabotage, or tramping.

Another sector of the Indian Ocean where we know that early trade flourished was from Egypt down the Red Sea, but possibly going no further. There is evidence of trade down the Red Sea as far as the main centre of Punt, on the African side, as early as 5000 BCE. However, from around the beginning of the first millennium BCE it seems that long distance trade in the areas we have just described declined. One explanation for this may be that several large states, which generated a demand for the luxuries which were the only items worth trading over long distances, declined around this time. Coastal trade continued, but longer distance trade seems to have revived only in the last three centuries before the beginning of the Common Era.20

Some older accounts tried to show that a revival of long-distance trade later in the first millennium BCE was due to the arrival of external traders, first Greeks and then Romans. (We must note in passing that neither of these descriptors are very precise. Very many people of very diverse ethnic backgrounds were included in these two broad categories.) Indeed, even the 'discovery' of the monsoon winds, a knowledge of which was so vital for making possible extended direct sailings, used to be attributed to a Greek sailor, Hippalus. To the contrary, it is now obvious that the essentials of the system we outlined in the previous chapter were known to sailors from at least the middle of the Bronze Age (3000–1000 BCE).21 Even if we lack hard evidence of their use so early, certainly the direct passage from the Red Sea mouth to India was being sailed in the second half of the second century, or even in the third century BCE, by Indian and Arab sailors.22

As to the influence of Greek and Roman sailors and traders, we know much more about them because of the records, albeit fragmentary, that they have left. Archaeological work can flesh out these literary accounts, and they show that neither Greeks nor Romans innovated; rather they participated in existing complex trade networks in the Indian Ocean. As one example of this sort of supplementation, the famous handbook, the Periplus, of the mid first century CE, says nothing about trade in the Gulf, but archaeology

shows it was well integrated in Indian Ocean trade by this time, continuing or reviving connections dating back three millennia.23

The older, very Eurocentric, view was that 'the moving force from first to last came from the West, the little-changing people of the East allowed the West to find them out.'24 Romans dominated the trade of the western Indian Ocean, there were Roman colonies in India, notably at Arikamedu in Coromandel. The last claim is based on discoveries of many Roman coins there by Sir Mortimer Wheeler, who failed to consider how the coins actually got there. Not for the first or last time, we need to know how Roman, or for that matter Chinese, goods got to where they have been found by archaeologists. Most of the time the Chinese, or the Romans, were responsible only for the first part of the travels of these goods. This is the well-known phenomenon of relay trade, where goods exchange hands many times before they stop travelling, and centuries later are dug up. Even some particular products have been misassigned. It once was thought that Red Polished Ware was Roman, so when we found it in India it showed contact with Rome. But Red Polished Ware was produced in Gujarat also.25

This is not to deny that there was extensive trade contact with the eastern Mediterranean. The first Greek captain in the Arabian Sea was Scylax of Caryanda, around 510 BCE, who on the orders of Darius I (521–466 BCE) sailed from the mouth of the Indus to the Gulf of Suez. Later Alexander sent off Nearchus of Crete (326–325 BCE) to sail from the Indus to the Gulf, where he provided an early account of pearl fishing. Greek activity around the time of Alexander extended past the Gulf to Broach in western India, and also around the coast of Oman. One could say that these were the first Europeans to sail in the Indian Ocean, but this sort of distinction is hardly useful. Better to see these people, and many others, travelling within an area called Eurasia. This area extends from the eastern Mediterranean down the Red Sea to the Arabian Sea, and in human terms provides a much better demarcator than the conventional and misleading separation between 'Europe' and 'Asia'.

The anonymous author of the famous Periplus, dating from about the middle of the first century BCE, operated from the west coast of the Red Sea and went at least as far as Malabar. He travelled by the direct passage

straight across; by this time this route had been sailed for some centuries. Most likely Indian or Arab sailors instructed Greeks and Romans in its use. Roman trade is also notable in the Indus Valley area long after the collapse of the Indus Valley Civilisation, where traders, not necessarily or even mostly from 'Rome', imported manufactures like silver plate, glass vessels and wine, and took off goods even from Afghanistan and China. There have been other Roman finds at Kolhapur, at Begram, north of Kabul, and of course at Arikamedu in Coromandel.26 However, it could be that much trade which has been identified as Roman was really Greek, as indicated maybe by the many Peripluses, which are of course Greek.

While the old notion of a trade dominated by Romans is certainly incorrect, this is not to deny that there were extensive connections, regardless of who was involved. What is interesting, as showing a pattern which continued until very recent times, is the way India exported much, but took in little except precious metals, as writers in Rome at the time pointed out and objected to. In return for Mediterranean bullion, India sent a vast variety of people and goods. These included spices, perfumes, jewels, textiles, ivory, and basic products like rice, sugar and ghee, and dyes like lac and indigo. Indian iron was considered to be very hard and pure. Exotic live animals arrived for the circuses, or to use as pets. Most of these goods had passed through many hands before they reached Rome, but some Indian people did make it that far, though most of these were specialists rather than traders. Mahouts often went with their elephants to Rome, along with Indian fortune tellers, conjurers and prostitutes. 27

Contrary then to foreign dominance, a more correct picture would see India acting as fulcrum for a very widespread trade, in which many different routes were sailed, and many different people participated, including Greeks, Egyptians, Arabs and Indians. An early centre linking trade between the Mediterranean and the Indian Ocean was Berenike, an Egyptian port on the west coast of the Red Sea. It was founded in the third century BCE, and was abandoned some time after the sixth century CE. This ancient port city had an extensive trade with India. Even the preliminary excavation done so far by teams from Leiden University and the University of Delaware has found seeds, peppercorns, bamboo, glass and stone beads, coconut husks, teak wood, textiles, sail cloth and pottery

dating back to a century either side of the beginning of the Common Era. There is a common Indian source for cloth found at Berenike and along the Silk Road to China. Berenike, then, was part of a very elaborate trade network.28

Two other ports flourished around the beginning of the Common Era. The first was Hormos, in the Red Sea, from which, so Strabo tells us, up to 120 vessels sailed each year to India. By this time at least, long-distance sailing was routine, covering this long passage of close to 3,000 nautical miles direct. The second, though there no doubt were many others, was Barygaza, in the Gulf of Cambay on the Narmada river. This great centre was, like all ports in this treacherous Gulf, difficult of access, so that local fishermen were appointed to go up the coast and guide merchant ships down the coast and into and up the estuary.29

Much of this data confirms the centrality of India in the whole trading system. In these centuries either side of the beginning of the Common Era the rise of centralised states in north India fostered trade, as also did the important Buddhist sangha, which provided a certain identity and cohesiveness for trading groups. We are assuming that there is a connection between centralised states and an increase in trade, the notion being that large states produce more demand for the luxuries which were, given constraints of technology, the main items which it was cost effective to carry over long distances.

The role of fisherfolk as pilots in the Gulf of Cambay may point to some direct state involvement in oceanic trade. In the case of the Tamil country, in southeast India, in the early historical period, from 300 BCE to 300 CE, cities were located on the coast, and were closely connected with overseas trade. When trade declined so did these port cities. The rulers of the time promoted this trade: they themselves were consumers of luxury goods, they developed ports and collected tolls and customs at them.30 So also Kautilya's famous Arthasastra, while concentrating its prescriptions relating to water matters mostly to the conduct of river passages – fords and ferries and such like – also shows a very substantial state interest in arranging to provide assistance to those in distress at sea, along with the collection of customs duties.31 True that this normative account may have little

connection with actual practice, yet at the least this and other Hindu texts, such as the Laws of Manu and the various Sastras, show a state awareness of maritime matters in India.

Apart from trade with the Gulf and the Red Sea, there were other connections across the western Indian Ocean. From very early on Sri Lanka acted as a hinge between the western and eastern oceans, as indeed one would expect given its location. On the other side, Ethiopia and India had contacts before the beginning of the Common Era. The first hard evidence comes from the Periplus, which also found Indian traders in Socotra, some of them permanently settled. Arabs also traded and settled on this island, and it is revealing that its name comes from Sanskrit.32

Further down the East African coast, we have described local maritime connections from very early on. By around the last century before the Common Era this local trade was integrated, to an extent, into the wider Indian Ocean world. This integration spread from north to south, that is starting in Somalia and incrementally spreading right down the coast. The focus of this trade was with the Red Sea, and while proto-Swahili people acted as mediators and collectors of goods in the embryonic port cities of the coast, the actual trade was handled by Arabs. Again then, if we look at Arab activity we get a useful corrective to the older notion of 'Roman' domination. Arabs traded extensively over the whole western ocean long before Islam, as indeed the Periplus noted. The author wrote, 'The Arab kings sent thither [to East Africa] many large ships, with Arab captains and agents. These are familiar with the inhabitants, and both dwell and intermarry with them; they know all their villages and speak their languages.'33

What products attracted traders to the Swahili coast? It seems that ivory was always important, finding ready markets in India and China. Trade in wood for Arabia probably also goes back far into history. In certain later times slaves for the Middle East were a major export, but this trade seems to have become important only around the eighth century when the Muslim empire centred on Baghdad needed them to drain the Tigris-Euphrates marshes. Roman pots have been found on Zanzibar island, dating from around the fifth century CE, though they were almost certainly carried not

by Romans but by Persians. Other finds on the island confirm an extensive trade, with goods originating in India, China and the Middle East. 34

In the third to the fifth centuries trade in the Indian Ocean was affected positively by the rise of the Sassanian empire in Persia. The sea played a central part in the general world view of the founder, Adashir I. There appears to have been some state encouragement and even direction, and certainly traders from Persia dominated trade in the Gulf and the western Indian Ocean. Some may even have reached southeast Asia and China.35 More usually western Indian Ocean ships used Sri Lanka as a transshipment place. Persians, and Axumites from the Axum port of Adulis on the southwest coast of the Red Sea, met traders from east Asia there. When the Buddhist pilgrim Fa Hsien visited Sri Lanka in the early fifth century he found not only Chinese goods but also Chinese traders present. Similarly linking the eastern and western oceans was the southeast coastal area of Coromandel: for example, there is evidence of Tamil products on the Red Sea coast of Egypt, and an inscription in Thailand from the early part of the Common Era.36

Within the eastern ocean, there was extensive trade all around the shores of the Bay of Bengal, while within island southeast Asia there were whole more or less autonomous and very complex networks which go back millennia. From about 500 BCE there were local networks connecting the Vietnamese coast with Indonesia and then around the Malay peninsular and into Burma even, and also linking Thailand with the South China Sea. Later, Indian prestige goods entered this network, from around the start of the Common Era, and as we will see below, ideas went with these goods. The Buddhist pilgrim Fa Hsien writing in 415 CE went on a ship from Sri Lanka to Srivijaya, and there were 200 travellers, who Panikkar identified as being brahmanical merchants, on board. We will quote his account of his voyage at the end of this chapter.

Longer distance trade connected India and China. There are two ways to travel east from India and get to China: overland across the Isthmus of Kra in the Malay peninsula, or passing through the Straits of Melaka. It seems that the overland route was chosen in earlier times, until better and bigger ships made the all-sea route from, say, Sri Lanka to the South China Sea

more cost effective. In the first century of the Common Era Funan, on the lower Vietnam coast, did well. The usual route was from India to the isthmus of Kra, and then to China via Funan. Indeed, this state expanded considerably in the next two centuries, until the sea route via Melaka took over. The seas of insular southeast Asia were then, from the sixth to the eleventh centuries, dominated by Srivijaya, and from the late thirteenth century by Majapahit. But by this time, as we will see in the next chapter, Islam was entering the region.

Yet again it must be stressed that our records in this period, and later, privilege long-distance, high-value trade. Yet this trade was and is very much superstructure. The base was coastal trade, and indeed a part of coastal trade was vital for the long-distance routes, for they fed local products into the wider circuit. Similarly, while the records often focus on glamorous valuable products, essentials were also carried. We have already described several routes where essentials were carried quite long distances. As before, this trade remains largely hidden from our records, but we do know that it was always important. The Periplus mentions bulk items being traded from India to the Red Sea and Egypt, such as grain, rice, ghee, sesame oil, cotton cloth and cane sugar, though this was not a direct trade for the cargoes were broken up at Socotra, or modern Somalia.

When we distinguish between luxuries and necessities, the essential point is that it is the latter which continues, unaffected by political rises and declines: indeed the very name implies this. Luxuries, on the other hand, suffer from a very labile, or discretionary, demand. 'Little and often usually outweighs big and rare.' This whole distinction is of great interest to political economy theorists, who consider that an exchange of necessities shows a greater integration of the two areas concerned. However, in real life most ships carried both, as indeed is obvious, and as has been shown when the cargoes of old wrecks are studied. One would be unlikely to find a ship full only of pearls, gold, and fine handicrafts. Historians have spent far too much time on luxuries, just because they are privileged in the records: in reality 'the glamorous manifestations of high-prestige trade should generally be regarded as outgrowths from or intensifications of the routine patterns of redistribution'.39

Another obscure category of people have also used the sea from the very earliest times, that is fisherfolk. It may be however that fishing in our ocean was, at least for early people with primitive craft, more limited than in other oceans. The continental shelf in the Indian Ocean is mostly much narrower than in other oceans, so there is less area from which to take demersal fish. And coral often gets in the way. We can assume that traditional fishing was mostly done close inshore, and also that few would be full time piscatorial specialists: rather, most of them were peasants as well. We quoted some descriptions of their humble craft earlier in this chapter. Another category again is pearl fishing in three different locations: the Gulf, between India and Sri Lanka, and in the Sulu archipelago. Again the sailors and divers would probably not be specialists, but rather have occupations on land also for the time outside the pearl fishing season.

We will quote a vivid account of a storm in the Bay of Bengal presently, but there was another invariant hazard to navigation which was man-made, in other words the prevalence of piracy, something which continues to today. Piracy is a surprisingly controversial matter. Some have seen pirates as macroparasites, human groups that draw sustenance from the toil and enterprise of others, offering nothing in return. Others point out that they are at least a sign of prosperity, for they need something to prey on; similarly, only a rich port is worth plundering. In rather sanguine fashion, Horden and Purcell claim that they are not really separate from others at sea: 'Piracy is the continuation of cabotage by other means.'40 Piracy was endemic from the earliest times in both the Red Sea and the Gulf. Often it was a matter of tribal raiders simply extending their activities to the sea, this then again reflecting the fact that most people at sea at this time also had links and occupations on land.

Not surprisingly, most rulers tried to ward them off, or even eliminate them. In the seventh century BCE the Assyrian King Sennacherib sent out an expedition against Gulf pirates, and over 300 years later Alexander the Great's fleet was harassed by them. Even the distant Roman emperor Trajan led a naval expedition to the Gulf to try and root them out. In the first century of the Common Era Pliny noted that ships in the Red Sea and those going across the Indian Ocean to southwest India carried archers to ward off pirates.41

Navigation in this early period is probably better depicted as wayfinding. A description of this in the Pacific fits very well with what we know of early Indian Ocean practice. Wayfinding is 'navigation by "reading" the stars, sun, ocean swells, wave patterns, cloud formations, wind directions, colour of the sea, flight of sea birds, and integrating all this information with the aid of a mental compass to determine or maintain a sailing course toward an unseen or unknown land target.'42 An early Pali text says that a navigator needs to know how to dock a boat, and take it out to sea, know the seasons, and the stars, and be able to find his location at sea 'by observing the fishes, the colour of the water, the species of the ground, birds, and rocks.' The magnetic compass came late to the Indian Ocean as compared with Chinese practice, but the astrolabe, the kamal, was used in the Indian Ocean from quite early times. Observing stars made finding a ship's position much more precise.43 Dr Varadarajan did a series of interviews in the 1970s with traditional coastal people in Gujarat, and as the knowledge is passed on orally from master to pupil over generations she claims what she was told was authentic for centuries past. Sailors and navigators learnt by experience, by sailing with a master. The nakhuda was all important. Not only was he the captain and navigator, he also was the commercial agent for the owners of the cargo, assuming they were not on board. She was even told what food should be taken. The list included tea, dried fish, cereals, pulses, onions, potatoes, and dried vegetables and pickles, these chosen as foods which could last for a year on a long voyage,44 not that a vessel would ever be at sea for this long. It may be that the notion was that ritually pure food from home would be available throughout a long voyage, so that possibly dubious food did not have to be taken on board at foreign ports.

Finally, what do we know about the actual experience of people at sea at this early time? The only extended account we have comes from the Chinese Buddhist pilgrim Fa Hsien. Here is his account of a long voyage, the first we have of an actual passage over the Indian Ocean. He set out from China overland for India in 399 and returned by sea in 413–14. In Sri Lanka:

he took passage on board a large merchant vessel, on which there were over two hundred souls, and astern of which there was a smaller vessel in tow in case of accidents at sea and destruction of the big vessel. Catching a fair wind, they sailed eastwards for two days; then they encountered a heavy gale,

and the vessel sprang a leak. The merchants wished to get aboard the smaller vessel, but the men on the latter, fearing that they would be swamped by numbers, quickly cut the tow-rope in two. The merchants were terrified, for death was close at hand; and fearing that the vessel would fill, they promptly took what bulky goods there were and threw them into the sea. Fa-Hsien also took his pitcher and ewer, with whatever else he could spare, and threw them into the sea; but he was afraid that the merchants would throw over his books and his images, and accordingly fixed his whole thoughts on Kuan-Yin, the Hearer of Prayers, and put his life into the hands of the Catholic [that is, Buddhist] Church in China, saying 'I have journeyed far on behalf of the Faith. O that by your awful power you would grant me a safe return from my wanderings.' The gale blew on for thirteen days and nights, when they arrived alongside of an island [somewhere in the Andamans], and then, at ebb-tide, they saw the place where the vessel leaked and forthwith stopped it up, after which they again proceeded on their way. This sea is infested with pirates, to meet whom is death. The expanse of ocean is boundless, east and west are not distinguishable; only by observation of the sun, moon, and constellations is progress to be made. In cloudy and rainy weather our vessel drifted at the mercy of the wind, without keeping any definite course. In the darkness of night nothing was to be seen but the great waves beating upon one another and flashing forth light like fire, huge turtles, sea-lizards, and such-like monsters of the deep. Then the merchants lost heart, not knowing whither they were going, and the sea being deep, without bottom, they had no place where they could cast their stone-anchor and stop. When the sky had cleared, they were able to tell east from west and again to proceed on their proper course; but had they struck a hidden rock, there would have been no way of escape.

They finally reached Java, but the subsequent voyage, on a large ship which carried 200 men and had provisions for fifty days, was equally trying. They went northeast for a month, and then met a 'black wind'. Seventy days out from Java they knew they should have been near Guangzhou (Canton), so they went northwest and in twelve days got to Lau-shan, on the southeast of the Shantung Peninsula.45

Fa Hsien was a pilgrim, engaged in a Buddhist act of piety. His travels open for us the matter of non-economic exchanges across the Indian Ocean in this early period. We need to look at the ideas that travelled with the goods, and especially the matter of the spread of Indic ideas, notably Buddhism and later Hinduism, to southeast Asia.

From at least the beginning of the Common Era we have good evidence of the spread to southeast Asia of Indian cultural and religious influences, first Buddhism, and from the fourth or fifth centuries brahmanical Hinduism. Indeed, Glover claims that economic contacts began even around 500 BCE, so that even this early southeast Asia was linked to a vast trading world spreading from the Mediterranean to Han China (*circa* 200 BCE to 200 CE). It could be, he claims, that this trade was done by Buddhist missionaries, or alternatively that Buddhist missionaries even this early (remembering that the Buddha lived during the sixth century BCE) accompanied traders. Such very early contacts are not universally accepted 46 yet certainly from the first century of the Common Era there is evident an increasing use of Indian Hindu and Buddhist religious ideas, monuments and icons, and Indian scripts and languages.

The connection between Buddhism and trade, including that to southeast Asia, is not really causal. Rather we can see in the early Common Era a mutually supportive interactive system. At the ideological level Buddhism encouraged lay devotees to accumulate wealth by trade; at the social level donations to Buddhist monasteries gave status to traders; and at the professional level Buddhist monasteries were repositories of knowledge and essential skills, such as writing. Not all traders were Buddhist, though many wealthy ones were. It is very unlikely that traders were the main agents in the spread of Buddhist, and later Hindu, ideas in southeast Asia, for most of them, while no doubt personally devout, were really ignorant peddlers whose opinions would carry little weight.

The initiative lay in southeast Asia. Local rulers there heard of south Indian ideas of kingship and ritual and imported Brahmins to raise their status and legitimise them. They were thus not mere passive recipients of a higher culture. These connections continued for centuries, as Buddhist pilgrims not only from southeast Asia but also East Asia visited holy sites in India, and studied in Sri Lanka. In Fa Hsien's time in the 420s we have two references to Sri Lankan Buddhist nuns travelling to China by sea,47 and from the fifth and seventh centuries we know of many Chinese pilgrims visiting Sri Lanka, and India. In the former they went to the tooth relic, that is an actual tooth of the Buddha in the interior at Kandy, and also studied important texts and worked with distinguished teachers. In India, where Buddhism was in decline, they went to places associated with the life of the Buddha, such as Bodh Gaya, where he attained enlightenment. There was a quite complicated circulation. In the early eleventh century the important

southeast state of Srivijaya built a Buddhist shrine in Nagapattinam, the main port of the great Cola Tamil kingdom, and the Cola ruler, who was a Hindu, allocated revenue from a village to support this shrine. 48 These contacts from insular, Malay, southeast Asia declined as Islam spread in the area soon after this, and new connections, now to Mecca, were created.

Others also travelled for religious purposes. In about 330 CE a Syrian Christian bound for India was shipwrecked off Ethiopia, and subsequently helped to convert the Aksumite empire to Christianity. Later a Bishop of Adulis called Moses visited India, along with a Coptic bishop from Egypt, to examine Hindu philosophy.49 The origin of the so-called St Thomas Christian community, and more generally other Christian activity in India, is a matter of much controversy. Perhaps our guiding principle here should be to follow a recent detailed study of early Christianity in Asia and ask ourselves which is most important, 'clearly established historical veracity or an ongoing enlivening tradition which has given and continues to give purpose, dignity and significance to the lives of thousands?' 50 If we follow this line of argument, then we really do not need 'proof' that St Thomas, the apostle Doubting Thomas, really visited and died in India. Gillman points out that many other early Christian traditions are accepted as 'real' without the need for any documented evidence, such as the notion of Peter as the first pope and an unbroken line of succession since then. Similarly, the first life of St Patrick of Ireland dates from 300 years after his death, and so strictly speaking can hardly be taken to provide an historically veracious account. We need to give the same latitude to the St Thomas Christians, even to the extent of accepting that his tomb, in a suburb of modern Chennai, is indeed 'authentic'.

Many Indian scholars insist that St Thomas did reach South India, where he established Christianity and later was martyred. Certainly there is evidence of Christians in south India from at least 300 CE. Jews may have arrived in India even before this time. There was continuing contact with the Persian church, which was Nestorian. This contact was maintained in harmony with the existing extensive sea trade from the Gulf to Malabar. There are indications that in this period, before Islam reached India, the various Christian communities, while not extensive, were prosperous and well-regarded.

The greatest movement of people for other than economic purposes is the migration, if this be the right word, of Austronesian peoples both east and west, though the movement west to Madagascar is our main interest. Broadly speaking, we know that Austronesian people, originating in modern Indonesia, possibly Sumatra, arrived in then uninhabited Madagascar at least by the middle of the first millennium CE, or probably some centuries before this. This is confirmed by linguistic evidence, among other things. Proto Malagasy comes from Indonesia, possibly not from Sumatra but rather from Borneo, as its closest relative is the Barito languages of Borneo. 51 The fact of a migration of Austronesian speakers to Madagascar is not in question. Apart from linguistic evidence, several food crops now found in Madagascar, which moved from there to the coast of East Africa, derive from Indonesia. These include banana, coconut and sugar cane. It is possible that the outrigger canoe also came from east to west across the Indian Ocean. As to bananas, there are two main kinds in Africa. The species found on the east coast is definitely Austronesian, that is it came with the migrants to Madagascar and on to the east coast, but so apparently is the plantain in West Africa. 52 Another contribution seems to be the disease of elephantiasis, which it is claimed originated in southeast Asia, but is widespread in southwest India and East Africa.

This movement west across the Indian Ocean was only a part of a remarkable migration of these Austronesian speakers. They left from an original homeland in south China or Taiwan perhaps six thousand years ago, and moved to southeast Asia. From there Austronesian speakers, in ocean-going canoes, sailed and settled all over Remote Oceania, from Hawaii to Rapa Nui (Easter Island) and Aotearoa (New Zealand) between 300 and 1200 CE. When we add in their movement to Madagascar, these intrepid sailors spread over a total of 225° of longitude. Manguin stresses that these migrations, including that to Africa, were not chance affairs, but rather were organised, and were done not in primitive outrigger dugouts but in planked boats. He sees all this as further evidence of an initiative from the peoples of southeast Asia, in contrast to the older wisdom that the area was merely a passive recipient of high culture from China and India.

Three problems remain. First, the evidence of Austronesian contact and influence on continental East Africa is fragmentary and controversial, for

even if there was a substantial Austronesian presence there at one time, this was submerged as Bantu people early in the Common Era spread south to the area and incorporated them. The evidence in Madagascar is much clearer, for the island was uninhabited when they arrived. African people arrived later to produce the complex mixture which is today's Malagasy society. Second, there is the matter of how they got to Madagascar. Some argue that they sailed direct from insular southeast Asia, taking advantage of the westward drift of the South Equatorial Current, and prevailing southeast trades in these latitudes. Others point to technological barriers to such long voyages, and claim rather that they proceeded westward piecemeal, going from port to port and island to island until they reached Madagascar. The latter scenario implicitly belittles their achievement, and has been discarded by those who stress southeast Asia autonomy. Third, was this a round trip? Did they go back and forth across the southern Indian Ocean? Many claim that they did, pointing to the xylophone as an example.55 Manguin claims that there was continuing reciprocal contact between the two areas up to the early centuries of Islamisation in Sumatra, that is up to the thirteenth or fourteenth centuries. 56 If this be so, it is then a matter of how this was done. The only possible route to take would be in the far south, taking advantage of the strong westerlies in latitudes 40 and 50° S, but we have no evidence of their doing this. The case for continuing contact is not proven, and indeed seems improbable.

We can close this chapter with two final and somewhat negative cautions. We have spent and will spend considerable space on trade and economic connections, yet even today these are not really central in the total economies of the surrounding countries. At least in this earlier period the vast bulk of the populations in countries around the Indian Ocean were peasants, most of them more or less subsistence, or at least exchanging goods locally, and by land. Economic exchanges by sea, even coastal ones, were not very important, except possibly for coastal people, but even they were amphibious, drawing on both land and sea. The relative lack of importance of sea trade can and will be demonstrated more clearly as our data improves in later chapters, but it is clear also in this early period. For example, it seems that trade between the Indus Valley Civilisation and Mesopotamia is of more interest to modern scholars than it was important

in the economies of either area. Trade within these two civilisations, and their surrounding land areas, was far more significant. If sea trade is of minor importance, then arguably it is religion and culture that is important when we look at exchanges by sea, most obviously the spread of Buddhist and Hindu ideas which we sketched earlier in this chapter. We will look at the Islamisation of the littoral in the next chapter.

Finally, we have implicitly been striving to find connections and unity across the ocean in this early period. Mark Horton, reviewing three new books on the maritime archaeology of the Indian Ocean, provides an important caveat to this attempt. While welcoming a new interest in maritime, as opposed to the traditional land-based, archaeology, he is dubious of the claims of widespread maritime connections before the beginning of the Common Era:

The idea that the sea unites, not divides, cultures is one that archaeologists have borrowed from Fernand Braudel: it has proved useful in the Mediterranean, perhaps it could be equally applied to the Indian Ocean? It has been in the Islamic period, but we need more indications that the communities along the rim of the Indian Ocean maintained maritime connections over sustained periods of time, to extend this to the prehistoric period. Certainly the evidence is not there yet....<u>57</u>

Chapter 4

Muslims in the Indian Ocean

The rise of Islam in the Hijaz in the early seventh century affected the Indian Ocean in several important ways. Describing these changes will be the main concern of this chapter, which uses material from the period up to the end of the fifteenth century. In this period there was both continuity and change. It would certainly be incorrect to write of an Islamic period or ocean. Many others traded and travelled, and coastal routes remained relatively unchanged. However, over a few centuries most of the population of the coasts of the Indian Ocean became Muslims, so that a large share of both coastal and oceanic trade was handled by the adherents of this new religion. It was much more centralised than was either Hinduism or Buddhism. This was especially manifested in the requirement, one of the most basic tenets of the faith, that if at all possible Muslims should perform the hajj, the pilgrimage to Mecca, at least once in a lifetime. A Muslim community developed around the shores of the Indian Ocean, linked by religion, whose commonality, while this must not be exaggerated, was created and reinforced by travelling scholars. Yet Islam's success was to a large extent a result of its tolerance of local traditions, so that scholars distinguish between prayers and other religious activities in the mosque, and those performed outside it. Rather than the coastal populations converting to Islam, they accepted it.

What was the attitude of the new religion to sea matters and to merchants? As to the latter, the normative position was well set out by the great fourteenth century social scientist Ibn Khaldun. He claimed countrymen were morally superior to townsmen, with merchants lower again: 'traders must buy and sell and seek profits. This necessitates flattery and evasiveness, litigation and disputation, all of which are characteristic of this profession. And these qualities lead to a decrease and weakening in virtue and manliness.' Some claim that normative Islam had a similarly negative attitude to sea travel. The Arabs as men of the desert used to be the prevalent western stereotype: they rode camels, not ships. Today we realise

that Muslims had an early and very successful interest in sea trade. The first Arab sea migration was to Abyssinia, in the time of the prophet. On several occasions in the previous chapter we described Arabs engaging in extensive sea voyages. This continued when Arabs became Muslims.

Authentic Islamic sources display a positive attitude to the sea. The Quran itself has several passages which speak approvingly of sea trade and maritime matters. As the Holy Book says, 'And of His signs is this: He sendeth herald winds to make you taste His mercy, and that the ships may sail at His command, and that ye may seek His favour, and that haply ye may be thankful.' And again: 'your Lord is He who driveth for you the ship upon the sea that ye may seek of His bounty' or 'Allah it is Who hath made the sea of service unto you that the ships may run thereon by His command, and that ye may seek of His bounty.'2 And again: 'It is He who subjected to you the sea, that you may eat of it fresh flesh, and being forth out of it ornaments for you to wear, and thou may best see the ships cleaving through it, and that you may seek of His bounty, and so haply you will be thankful.' Similarly, the Caliph Umar II was quoted as saying 'Dry land and sea belong alike to God; He hath subdued them to His servants to seek of his bounty for themselves in both of them.'3

We have seen that the Indian Ocean was already a place of movement, circulation, contacts and travel over great distances. It could be that Islam fits well into this sort of environment. Later Malay literature powerfully links notions of the sea, God, man and the transitory nature of the world. The sea is a trope for Islam. 'O Seeker, this world is like a wave. God's condition is like the sea. Even though the wave is different from the sea, it is in reality nothing but the sea.'4

We now have much more detail on the ships venturing out over our ocean. At the most humble level, even today one sees coastal fishers, some merely astride a log, rising and falling, vanishing and appearing, in the swell. Coastal craft, used by fisherfolk, and as lighters to take people and goods to larger ships standing off shore where no harbour or estuary was available, were described in the previous chapter. These accounts related mostly to the east coast of India, where the lack of good harbours necessitated lighters. Over much of the rest of the littoral there were estuaries or harbours, and it

was here that the famous dhows were found. These larger ships however had many of the characteristics of the coastal craft we have previously described.

The term 'dhow' is used by westerners for a variety of craft, large and small, which dominated most trade and navigation in the western Indian Ocean for centuries. There are many different types, depending on size and location, yet they did share enough common characteristics for us to use a generic term for them. The actual word is not Arabic. It probably comes from the Persian word *dawh*. They have attracted much attention from a truly international array of scholars. These 'traditional' dhows were found all over the western Indian Ocean, that is from east Africa around to south India, and at times much further east. This type of ship long-predates the arrival of Islam. It presumably has Gulf or Red Sea origins, but we know little about ships before Islam.

Marco Polo, writing about Hurmuz, left a detailed, accurate, and rather negative account:

Their ships are wretched affairs, and many of them get lost; for they have no iron fastenings, and are only stitched together with twine made from the husk of the Indian nut [coconut]. They beat this husk until it becomes like horse-hair, and from that they spin twine, and with this stitch the planks of the ship together. It keeps well, and is not corroded by the sea-water, but it will not stand well in a storm. The ships are not pitched, but are rubbed with fish oil. They have one mast, one sail, and one rudder, and have no deck, but only a cover spread over the cargo when loaded. This cover consists of hides, and on the top of these hides they put the horses which they take to India for sale. They have no iron to make nails of, and for this reason they use only wooden trenails in their shipbuilding, and then stitch the planks with twine as I have told you. Hence 'tis a perilous business to go a voyage in one of those ships, and many of them are lost, for in that Sea of India the storms are often terrible. Z

A Muslim pilgrim in the Red Sea in the late twelfth century left a rather similar account. Ibn Jubayr wrote:

The jilab that ply on this Pharaonic sea [that is, the Red Sea from Aydhab to Jiddah] are sewn together, no nails at all being used on them. They are sewn with cord made from... the fibre of the coconut and which the makers thrash until it takes the form of thread, which then they twist into a cord with which they sew the ships. These they then caulk with shavings of the wood of palm-trees. When they have finished making a jilabah in this fashion, they smear it with grease, or castor oil, or

the oil of the shark, which is best. This shark is a huge fish which swallows drowning men. Their purpose in greasing the boat is to soften and supple it against the many reefs that are met with in that sea, and because of which nailed ships do not sail through it. The wood for these parts is brought from India and the Yemen, as is the coconut fibre. A singular feature of these jilab is that their sails are woven from the leaves of the muql tree [a kind of gum-tree], and their parts are conformably weak and unsound in structure. Glory to God who contrives them in this fashion and who entrusts men to them. There is no God but He.'8

What then are the main characteristics of these craft? As these contemporaries pointed out, teak from Malabar in southwest India was used almost universally, for this was highly resistant to decay, and provided it was treated properly, along the lines suggested by Ibn Jubayr, it would not split, crack or shrink in salt water. This wood was used to make a hull using the carvel method: that is, the wooden planks of the hull were laid edge to edge, not overlapping as in western ships. They were held together by coir fibre stitching which passed through holes in the planks. There was no iron or bolts, and no ribbing or framework. However, wooden dowels were used, at least on the bigger boats, for strength. The hull was made watertight by inserting resin or other materials between the planks. This has to be differentiated from the European practice of caulking, which was done after the ship was assembled. They had no keels, but instead used either sandbags, or heavy parts of the cargo, as ballast in the bottom of the hold. These dhows had stern post rudders, with ropes attached, not a tiller. One pulled on ropes to steer the vessel. Most had only one mast, and a sail made of matting, though late in our period cloth was also beginning to be used.

The hulls were double ended rather than having square, transom, sterns. On the largest dhows there may have been a raised poop deck, with cabins underneath, but most often the holds were open and there was no deck. As Correia observed in Cannanor around 1500:

in lieu of decks, the hold was built up with huts and compartments for merchandise, covered with plaited palm-leaf thatch, acting as a roof; the water would flow down to their sides, then along the hull and gather at the bottom of the hold where it could be bailed out, thus not wetting the merchandise which was kept well packed into these compartments. On top of these thatched roofs, they would dispose strong cane lattice-work, on which one could walk without damaging the huts below.... People have their lodgings on top, for nobody stays below, where the merchandise is found.

Remarkably heavy cargo, camels, horses, even elephants, could be carried. $\underline{10}$

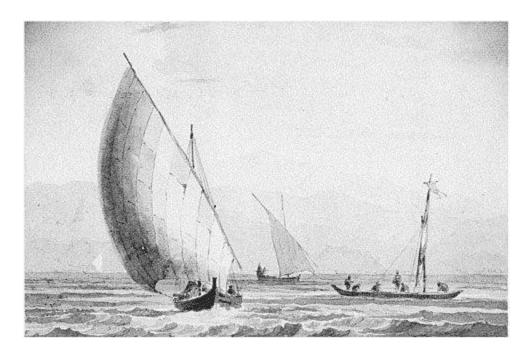


Figure 1 A Terry Dinghee. Etching. © National Maritime Museum, London

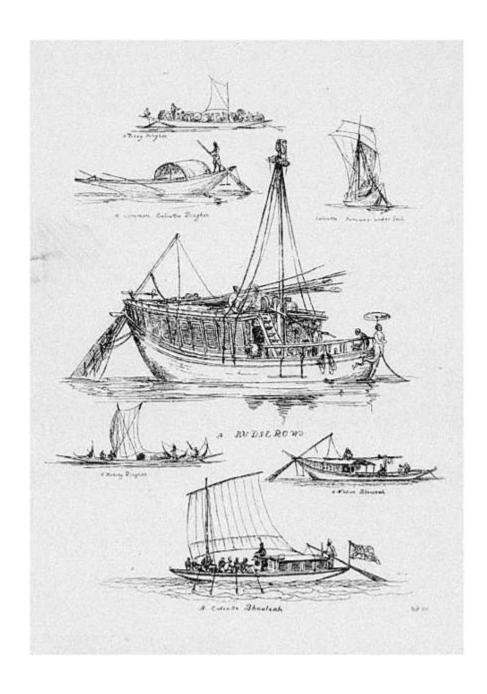


Figure 2 Indian Sailing Boats. New mount. Produced by Thomas Daniell (artist). © National Maritime Museum, London

The lack of metal in the construction excited much comment, most of it negative, from European observers, such as Marco Polo who we quoted above. The fabulist Sir John Mandeville claimed they did not use nails as there were magnetic islands which would draw to them any ship which contained metal. 11 At first glance the lack of metal condemns dhows as

primitive craft indeed, yet their method of construction was well suited to conditions in the Indian Ocean. As Ibn Battuta wrote, 'The Indian and Yemenite ships are sewn together with them, for that sea is full of reefs, and if a ship is nailed with iron nails it breaks up on striking the rocks, whereas if it is sewn together with cords, it is given a certain resilience and does not fall to pieces.' In Cambay he wrote of the Gulf that 'it is navigable for ships and its waters ebb and flow. I myself saw the ships lying on the mud at ebb-tide and floating on the water at high tide.'12 Their flexibility, thanks to the coir, meant that they were well adapted to the sandy shores of large parts of the Indian Ocean littoral. They could be driven ashore by storms, or deliberately to unload cargo or undergo repairs or careening, and even in the breakers off the Coromandel coast their flexibility enabled them to 'give' and survive, where a more rigidly built ship would have shattered.

A considerable quantity of coir thread or rope was needed: Tim Severin built a quite small replica dhow, yet it used up about 400 miles of rope! 13 The coir had to be kept in salt water to prevent deterioration, as Bowrey noted:

The Cables, Strapps, &c. are made of Cayre, vizt. the Rhine of Coco nuts very fine Spun, the best Sort of which is brought from the Maldiva Isles. They are as Stronge as any hempen Cables whatever, and much more durable in these hott climates, with this provisor, that if they chance to be wet with fresh water, either by raine or rideinge in a fresh River, they doe not let them drye before they wett them well in Salt water, which doth much preserve them, and the Other as much rott them.14

The coconut tree was a great provider of useful products. Indeed, in the Maldive and Laccadive islands ships were built entirely from this tree: the hull, masts, stitches, ropes, and sails. As noted, most other areas used teak for the hulls, but the sails were usually woven from the leaves of palm or coconut trees; cotton sailcloth apparently came in later, though possibly before 1500.15

These sails were the famous triangular lateen sails so evident even today in the Indian Ocean. The name is a misnomer, as it comes from the time of the Crusades, when western Europeans first saw them, and called them the Latin sail, from the French *une voile latine*. They had been used by the Arabs for some centuries before the Common Era, and were the first sails

which allowed a ship to beat into the wind. As compared with European square sails, a lateen rigged ship can sail well with the wind abeam, that is 90° against the direction of travel, and even reasonably well with the wind forward of the beam, at 50° or even 60° off the bow. Some authorities say dhows tack straight across the wind as a modern yacht does, but in fact they changed course by wearing around, stern to wind, instead of tacking. 16

Lateen sails are often described as a 'gift of the Arabs' to western sailors. However, Campbell claims that they developed independently in several places. Their origin may be from Persia, rather than pre-Islamic Arabia, and it could be that they reached the Mediterranean via Persia. They were found in the Mediterranean from the beginning of the Common Era, and he suggests that Arabs then learnt to use them from earlier users in both the Mediterranean and the Indian Ocean. Very similarly shaped sails evolved independently in eastern Indonesia and were used in the great voyages in the Pacific by Austronesian peoples which we mentioned in the previous chapter (page 60). Campbell claims that they are not particularly effective sails anyway, though this obviously raises the question of why they were used for so many centuries. 17

To make the dhow watertight was only one reason for treating the wood. Equally important was to deter the accumulation of barnacles and other growths on the hull. Of these, the most dangerous was teredo, or shipworm, a ravenous mollusc which wreaked havoc in tropical waters. Severin described their rapid penetration. He found that if it was not treated, the timber in his replica dhow was nearly destroyed after two months. Even after this short time wormholes as big as knitting needles appeared, and one could snap with bare hands panels $2\frac{1}{2}$ inches thick. 18

The traditional solution was to smear the hull every two months or so with a combination of boiled animal or fish fat and crushed lime. In the absence of dry docks this required running the vessel aground, but thanks to the flexibility of the construction this could be done easily and safely. There were two processes involved. The carvel method of construction meant that resin was used to fill gaps between the planks while the boat was being built, but then the process of greasing and smearing was done routinely during the life of the vessel.

The navigator of the dhow in our period, such as the famous fifteenth century sailor Ibn Majid, was the mu'allim, who sailed the ship and was responsible for what happened on board. He checked the fitting out, stores, gear, and loading. He was in charge of the crew and passengers, looked after their safety and health and solved their quarrels. All this was laid down in the contract drawn up before the ship left. It was required to take a set number of passengers, and a set quantity of their effects. There were also bills of lading governing the cargo. His duty of care ended when he got the ship back to its home port. Ibn Majid also advised the captain to

Be quick to make a decision.... It is necessary when you sail to be clean.... Forbid all those who sail from making fun of others on the sea; it will only result in evil, hatred and enmity and he who does this continually will not be spared from grudge or hatred or contempt.... Consult other people and improve your own opinion.19

Dhows of one sort or another were the dominant form all over the western Indian Ocean. Their sizes covered a wide range, from less than 50 tons up to perhaps 500. Different sizes had different names. A major variation was the ships built in Gujarat, which in the period before Europeans were the largest in this region, being up to 800 tons, and on average 300 to 600 tons. By contrast, when Magellan set off to sail around the world he had five ships, the largest of which was only 120 tons and 31 metres long. In 1577 Drake sailed out of Plymouth with three ships. One was a bit over 100 tons, the other two only 80 and 30 tons. 20 The early Portuguese found these Gujarati ships to be formidable indeed: 'these ships are so powerful and well armed and have so many men that they dare to sail this route [from Melaka to the Red Sea] without fear of our ships.'21 While these large Gujarati ships still usually had no deck, their construction was different, as a process called rabetting, rather like tongue and groove, was used to join the planks together. 22 An English traveller around 1750 praised these ships highly:

Surat ships last much longer than Europe ships, even a century, because they are so solidly built, the planks in their bottom and sides being let into one another in the nature of rabbet work. The knees are natural shape not warped, or forced by fire. Teak is as good as oak, and bottoms rubbed with wood oil keep planks from decay.

Grose also approved of the coir rigging: 'more harsh and intractable than what is produced from hemp', but they lasted longer than hemp in salt water. Even the cotton sails were fine: true, they were not as strong as European canvas, but they were less liable to split.23

Barbosa's account of Calicut very early in the sixteenth century seems to point to another regional variation, that is the use of keels. He wrote of the pardesi Muslims, those from the Red Sea and Egypt, that

In the days of their prosperity in trade and navigation they built in the city keeled ships of a thousand and a thousand and two hundred *bahares* burden [about 250 tonnes]. These ships were built without any nails, but the whole of the sheathing was sewn with thread, and all upper works differed much from the fashion of ours, they had no decks. 24

Once we round Cape Comorin and enter the Bay of Bengal we encounter very different ships. Some of them were great Chinese ships, which sailed in the Bay of Bengal and around to Malabar until the mid fifteenth century. We have a charming account of Song sailing from a Chinese source:

The ships which sail the southern sea and south of it are like houses. When their sails are spread they are like great clouds in the sky. Their rudders are several tens of feet long. A single ship carries several hundred men, and has in the stores a year's supply of grain. Pigs are fed and wine fermented on board. There is no account of dead or living, no going back to the mainland when the people have set forth on the azure-blue sea. When the gong sounds at daybreak aboard ship, the animals can drink their fill, and crew and passengers alike forget all dangers. To those on board, everything is hidden and lost in space – mountains, landmarks, and foreign countries. The pilot may say, 'To make such and such a country, with a favourable wind, in so many days, we should sight such and such a mountain, [then] the ship may steer in such and such a direction.' But suddenly the wind may fall, and may not be strong enough to allow the sighting of the mountain on the given day. In such a case, the bearing may have to be changed. Then again, the ship may be carried far beyond [the landmark] and lose its bearing. A gale may spring up, blowing the ship off course, or the ship may encounter shoals or hidden rocks and be broken apart to the roofs [of the cabins]. A great ship with heavy cargo has nothing to fear in high seas, but in shallow water it will come to grief.25

Two foreign travellers, Marco Polo and Ibn Battuta, left more detailed descriptions. Marco Polo described the ships he saw in the thirteenth century on the Fujian coast. They had only one deck,

though each of them contains some 50 or 60 cabins, wherein the merchants abide greatly at their ease, every man having one to himself. The ship hath but one rudder, but it hath four masts; and sometimes they have two additional masts, which they ship and unship at pleasure. Moreover the larger of their vessels have some thirteen [watertight] compartments or severances in the interior, made with planking strongly framed, in case maybe the ship should spring a leak, either by running on a rock or by the blow of a hungry whale.... The fastenings are all of good iron nails and the sides are double, one plank laid over the other, and caulked outside and in. The planks are not pitched, for those people do not have any pitch, but they daub the sides with another matter, deemed by them far better than pitch; it is this. You may see them take some lime and some chopped hemp, and these they knead together with a certain wood-oil; and when the three are thoroughly amalgamated, they hold like any glue. And with this mixture they do paint their ships.

Each of these great ships carried 200 or 300 sailors. If the wind dropped sweeps were used, each taking four sailors to row. They also each had two or three large tenders attached, with 50 or 60 sailors on each, and ten smaller boats to catch fish, bring supplies, and lay out anchors. These were slung to the side of the big ship, and put in the water as needed. Repairs were easy: they merely nailed another layer of planks over the existing ones.26

Ibn Battuta found a vast array of vessels in Calicut in the early fourteenth century, from Java, Ceylon, the Maldives, Yemen and Fars. However, the greatest were thirteen Chinese vessels. His eyewitness account is of very large ships indeed. He wrote that they were called junks, and had up to twelve sails, and 1,000 men on board, 600 of them sailors and 400 archers and other soldiers. All this may sound incredible, yet Ibn Battuta has a reputation for veracity, and he did travel on one of these ships himself. The oars were as large as the masts on the dhows with which he was familiar, and each was worked by ten or fifteen men. His ship had four decks,

and it has cabins, suites and salons for merchants; a set of rooms has several rooms and a latrine; it can be locked by its occupant, and he can take along with him slave-girls and wives. Often a man will live in his suite unknown to any of the others on board until they meet on reaching some town. The sailors have their children living on board ship, and they cultivate green stuffs, vegetables and ginger in wooden tanks. The owner's factor on board ship is like a great amir. When he goes on shore he is preceded by archers and Abyssinians with javelins, swords, drums, bugles and trumpets. 27

These great Chinese ships sailed south through the Malay world and on to India, and sometimes even beyond this. However, this was a rather temporary presence. They came south to the Malay world only from the twelfth century, and may have been displaced for a time in the mid fourteenth century when the powerful Javanese state of Majapahit was at its height. Under the Ming, from 1368 Chinese ships re-entered southeast Asian waters, reaching a massive peak with the Zheng He expeditions of the early fifteenth century. Soon after this, long-distance Chinese voyaging in these monsters ended.

In the Malay world most of the local craft were small craft, capable of sailing between the myriad islands. As elsewhere, the vast majority of boats were humble things used by fishers, or for short fair-weather voyages using the monsoons. However, Manguin claims that from the early first millennium of the Common Era maritime powers in the region, that is especially Srivijaya and later Majapahit, built, owned and operated oceangoing ships of considerable size, up to 700 tons burthen and carrying up to 1,000 people. These were not exactly junks, for while Chinese ships had used nails for centuries, these ships did not. Nor were they sewn; rather they were held together with dowels. There was, following Chinese practice, multiple sheathing of the hull. The steering gear was different from dhows, for they had double quarter-rudders, and two to four masts and sails. Manguin claims, controversially, that these large ships were distinctively southeast Asian. This statement is to be seen as part of the general historiographical tendency to see this region as having a creativity and culture of its own, not as a passive recipient of high culture from the north or the west, that is from China or India. 28 Rather mysteriously, these ships vanished in the later sixteenth century, possibly because they could not stand up to Portuguese cannon.

How did captains find their way over the ocean? There is a contrast here between blue water sailing and finding one's way in more restricted waterways. In the treacherous Red Sea, Ibn Jubayr was very impressed with the navigational skills of sailors in these confined waters: 'We observed the art of these captains and the mariners in the handling of their ships through the reefs. It was truly marvellous. They would enter the narrow channels and manage their way through them as a cavalier manages a horse that is

light on the bridle and tractable.'29 To a considerable extent, navigation was still like the way finding we described in the previous chapter (see page 56). It was a matter of the run of the water, experience, birds, seaweed, fishes, and sightings of known areas of land. Experienced navigators often wrote down what they had learnt. The most famous was Ibn Majid, who in the following passage, just like the Song source we quoted earlier, is using land sightings for guidance. When approaching Calicut, he says, 'look out for the hill between the mountains which are above the coast and there is no other such hill in these places and nothing so useful as a guide especially in the dark and its sides slope steeply.' When one is approaching from the north the ship should stay in about four and three-quarters fathoms of water until this hill is north-north-east of you, then approach the coast until the water is four and one-half fathoms and the hill becomes north by east and then north, and so on.30

Ibn Majid's work is an example of the pilot guides and navigational literature which were commonplace in the ocean. This geographical literature, from both the Chinese and the Arab side, showed that both knew the whole ocean, though Arabs found a limit at Madagascar. Ibn Majid wrote that 'to its south is the sea known to the Greeks as Uqiyanus which is known to the Arabs as the 'Ocean which encircles the world.' Here is the beginning of the southern Dark regions to the south of this island.'31 Tibbetts claims that there really was no exclusivity in nautical knowledge. Rather there was a common body of knowledge shared by Arabs, Chinese, Indians and Malays. It may be that practical navigational charts were not known before the Europeans, but there certainly were maps, as we will see. Charts may not have even been necessary, for navigation, apart from the use of wayfaring techniques, was done by observing the sun and the stars.32 In this the Arabs were simply following tradition, for the Beduin had long done this to find their way across the desert.

Again Ibn Jubayr tells us about this use. He was going on pilgrimage to Mecca, and embarked at Aydhab bound for Jiddah. They left on their jilabah, and on the evening of the second day there

rose a storm which darkened the skies and at last covered them. The tempest raged and drove the ship from off its course and backwards. The fury of the wind continued, and the darkness thickened and

filled the air so that we knew not which way lay our course. Then a few stars appeared and gave us some guidance. The sail was lowered to the bottom of the mast, and we passed that night in a storm which drove us to despair....33

More usually either the North or Pole Star or the sun was used as a referent, and latitude was worked out from their height, measured in finger widths. The compass was apparently already known, as it had been long used by the Chinese, but it seems not to have been very widely used. In any case, it has been claimed that Arab empirical methods were more than adequate to determine latitude quite accurately. Based largely on a technical analysis of Ibn Majid's famous work, Clark claimed that the methods he describes compare well with modern stellar methods using spherical trigonometry, the navigational triangle and data from nautical publications. In sum, we can perhaps claim that during this period Arab navigation was a mixture of a craft mystery, based on accumulated oral tradition, and an applied science, the latter being the dominant technique today. In Europe the latter was becoming dominant in the sixteenth century.34

While Arab navigation may ideally have served the sailors well, contemporary accounts do not always give an impression of 'scientific' exactitude on board ship. One tale from the first half of the tenth century, no doubt based on real experience but with some embroidery, concerns a man called Allama, who was going from India to China. It came the time for the dawn prayer, so he went to the lavatory to do ablutions. Then he looked at the sea and was terrified. He forgot his ablutions and prayers, and instead rushed up on deck and got the men to lower the sails, and throw overboard all the cargo. Then he got everyone to purify themselves and pray. Sure enough, a huge storm came up that night, and only this ship survived. A similar account tells of Captain Abhara, a native of Kirman, where he was a shepherd. Later he became a sea captain, and went to China seven times, which was unheard of as it was so dangerous. 'If a man reached China without dying on the way, it was already a miracle. Returning safe and sound was unheard of. I have never heard tell of anyone, except him, who had made the two voyages there and back without mishap.' Other similar tales make Arab navigation sound very ad hoc indeed. The same Abhara knew that on the way to China on each thirtieth day the water went down very greatly and ships ran onto rocks, especially as a violent gale would come up at the same time. Another captain proffered that 'if you want to know whether or not you are near land or a mountain, look out after the afternoon prayer, when the sun is going down. At that time, if you are opposite a mountain or an island, you will see it distinctly.'35

European map making was revolutionised following Marco Polo's journey to and from China in 1271–92. Drawing on this, Europeans produced two famous maps, greatly in advance of what they had done before: the Catalan map of 1375, and especially Fra Mauro's map of 1458. East Asia had relatively sophisticated charts and maps by at least the fifteenth century.36 Mills has discussed in detail the Mao K'un map, which refers to the time of Zheng He's voyages.37 He considers it to be far superior to European maps of the same time, when the Portuguese had just started voyaging down the west African coast. This Chinese chart goes all the way from East Asia to India, and on to Persia, Arabia and East Africa. Mills' claim is that obviously Europeans did better in mapping the west, and Chinese the east; Chinese superiority is seen in their much better attempt to map the area in between, that is Arabia, India, and East Africa. This Chinese map showed a more accurate knowledge over a much larger area of the world than was available to Europeans at the same time. Several of their accounts depict a western and an eastern ocean, with the division at the Straits of Singapore. This is seen most clearly in the account by Wang Dayuan, who travelled extensively in the 1330s.38 My own brief to a large extent follows this division, for most of the time I also stop around these straits.

Even more extraordinary is the Korean Kangnido Map of 1402, which seems to draw on earlier Chinese and Arab works. It has clear delineations of Africa and the Arabian peninsular, and a recognisable outline of Europe, though India is submerged in the Chinese continent. Not surprisingly, Korea is shown as very large indeed, as large as all Africa. At a time when Europeans knew almost nothing of East Asia, this map has a clearly recognisable Mediterranean Sea, and Iberia, Italy and the Adriatic Sea. There are some hundred as yet unidentified place names in the Europe area, and about thirty-five in Africa, most of them on the southern Mediterranean coast.39

Another example of sophisticated map making comes from Java, and like the previous two shows that there was a large degree of interaction and exchange of knowledge between map makers at this time. In 1512 the Portuguese captain Albuquerque was shown a Javanese chart which delineated the Cape of Good Hope, Portugal, Brazil, the Red Sea, the Persian Gulf, the country where the gold is (Minangkabau in Sumatra), the clove islands, the Malukus, Java, the Banda islands, Siam, the navigation of the Chinese, and the courses followed by their ships. All the names are marked in Javanese script.40 This sort of interchange extended in some surprising directions. The Chinese, even if they did not travel, certainly picked up much information at second or third hand. One eighth-century Chinese author described the people of Bobali, which is somewhere in northern East Africa. They 'eat only meat. They often stick a needle into the veins of cattle and draw blood which they drink raw, mixed with milk.' Intriguing to find that this is clearly a description of the same people whom a sixteenth-century Portuguese cleric found. He wrote of the Segeju that 'They own much cattle, the milk and blood thereof being to them as food; they eat the flesh raw without any other manner of ordinary food, as it is said, and they bleed the oxen every other day.'41

Finally, another Muslim example, this time the Turk Piri Reis and his magnificent *Kitab*, completed in 1521 and now available in a stunning four volume facsimile edition with translation. He wrote of the 'great sea', that is the all-encircling sea:

All the others are united with the Bahr-Azam. The Ocean is the sea into which they are all collected. It encircles the world. It is the head of all the seas; from it all seas emerge and to it all return. As I have told you, the fact is that all the other seas are but gulfs of the Ocean. The sea is like a tree that spreads everywhere left and right. The source of them all is the Ocean, of which they are the branches and twigs.

He described the Portuguese voyages to India, and among other places identified Madeira, Cape Verde, Brazil, Abyssinia, and Mogadishu, which he says is near the entrance to the Red Sea. Below 55° S all is Darkness, and similarly above 55° N. He has a brief account of China, which he says is based on what the Portuguese say, and then a fabulous account of an island with all sorts of monstrous people, based on 'those who voyaged

there'. His account of India is rather vague, and he thinks it is winter in India when it is summer in Europe. A few years after this *Kitab* he drew a map of the Atlantic which included the North American coast from Greenland to Florida, and was quite accurate.42

We have already quoted the famous Muslim traveller Ibn Battuta several times. This much-travelled scholar left a copious account of his travels and adventures all around the Indian Ocean and beyond, for he also visited many parts of Europe and West Africa; indeed he came from Morocco. In sum he covered 75,000 miles in a period of nearly thirty years. His travels date from the first half of the fourteenth century. In the rest of this chapter I intend to use him as a 'tin opener', to introduce the various topics I want to cover in this account of the Indian Ocean to about 1500. Each section will start with his observations, and will introduce my general discussion of the relevant topic, the latter based on other contemporary, and much secondary, literature. My intention here is rather different from Ross Dunn's.43 He has provided an excellent account of Ibn Battuta's travels and much detail to locate his descriptions. However, I will use his account merely to open up general matters to do with the Indian Ocean, such as port cities, piracy, the dangers of travels by sea, Muslim attitudes to sea travel, and especially his frequent mentions of a network of Islamic scholars, of whom he was one, who were spread all around the ocean, travelling frequently, and serving to spread and consolidate the faith. We will start with this topic.

We described in the previous chapter many Buddhist and Hindu people travelling to service or convert kings and others in southeast Asia, and a reverse flow of Buddhist pilgrims, especially from East Asia, going to India to see the holy places. However, the first of these declined as Buddhism declined in India. It was replaced by a circulation of students and pilgrims to the new centres of the faith, especially Sri Lanka, Burma and Thailand. The fact that Buddhism in India was slowly sucked back into a new Hinduism similarly meant that fewer from outside now wanted to visit the homeland of the faith, though some pilgrims continued to come, and indeed still do, to see the holy places associated with the life of the Buddha. Nevertheless, by this time the dominant religious circulation in the Indian Ocean was being done by Muslims, and Ibn Battuta gives us numerous accounts of such people.

In 1331 he was in Mogadishu. As a man of learning Ibn Battuta was very well treated, and lodged with the qadi. The Sultan spoke Arabic, but his first language was Maqdishi. Ibn Battuta was taken by the qadi, who had originated in Egypt, to the sultan. As a man who had come from al-Hijaz he was treated with respect. He was given robes, including a tunic of Egyptian linen, a furred mantle of Jerusalem stuff, and an Egyptian turban. There were many jurists, sharifs, sheikhs and people who had done a hajj in Mogadishu. Ibn Battuta then went on to Kilwa, then at its height of power and riches. He found the sultan to be very generous, and commented on the large number of sharifs from Iraq and the Hijaz and other countries who had flocked in to benefit from his pious patronage.44

Once he got to Malabar, Ibn Battuta found a similarly diverse assemblage of Muslims in positions of secular and religious authority. At one place the qadi and preacher was a man from Oman. The amir (leader) of the merchants in Calicut was from Bahrain. On one of the junks that he travelled on the factor was from Syria, while in Quilon the chief Muslim merchant was from Iraq, and the qadi from Qazwin.45

What our traveller is describing is a vast network of Muslims all around the periphery of the Indian Ocean. He was welcomed everywhere as a prestigious scholar, an exemplar of the faith. Yet our hero was not really a very prestigious person in the Muslim heartland. He would have been unlikely to flourish in Mecca or Damascus or Cairo, but he was a big fish in Delhi and other newer Islamic places such as the Swahili coast where rulers were keen to implant and strengthen Islam. His perhaps surprisingly cordial reception in so many places was probably helped by his own very strong sense of his own worth. He was rather self-important, and judgemental to a fault of other Muslims. He took it on himself to correct people who got things wrong, even merely in matters of pronunciation.

Ibn Battuta opens up three related matters, which were among the most significant occurring in the Indian Ocean in our period: conversions to Islam, and then efforts to consolidate the faith, and ties back to the centre. In our period, to the end of the fifteenth century, the first is most important, for this was the time when the relatively new religion spread rapidly. It will be remembered that the Prophet died in 632 CE. The faith spread rapidly by

both land and sea from its origins in the Hijaz area of western Arabia: to Persia, Egypt, North Africa, areas now known as Syria, Turkey, Iraq, and even to northwest India in its first century. It also spread by sea, carried by existing Arab trade networks, which we found going back some centuries before these traders were converted to the new faith. It is this which will occupy our attention, more than the continuing matter, even to today, of the travels of Muslim scholars whose aim is to improve the observance of an existing Muslim community all around the ocean, to root out practices seen to be un-Islamic, and to rectify back-sliding. In short, we are looking at the creation of the community, rather than its consolidation. The latter will not be totally ignored, but it will be considered more fully in later chapters.

The cosmopolitan, international, aspect of Islam has often been cited as a prime motivation for conversion. Coastal people especially find their indigenous beliefs, localised and very specific, to be inadequate as their world expands. When they are exposed to a universal faith (in the case of the East African coast Islam was represented in their foreign business partners), the attraction is obvious, and can be widely seen all over the Indian Ocean world at this time.46

Parkin has suggested that it is more accurate to write of the

'acceptance' of Islam, which is likely to take longer and to be reciprocally inscribed in pre-existing custom and cosmology. The term conversion pre-supposes a shift from one to another unambiguously defined religion. Acceptance is less visibly dramatic and does not mean abandonment of a pre-existing cosmology. Yet it may well typify much Islamisation in the region in allowing for Islamic and non-Islamic traits to inter-mingle steadily. 47

This means that we are looking at additive change much of the time, as opposed to substitutive change. The former implies that an existing body of belief is added to, while the latter means existing notions are cast aside and replaced. Conversion then is a process rather than an event, and may extend over several generations.

There is also the matter of coercion and the use of power, whether explicit or implicit. No doubt in many inland areas Islam spread in part through coercion. It is not a matter of Islam spreading at the point of a sword, but rather that as Muslim armies conquered huge territories many of the conquered adopted the religion of their new masters. This applies in most of the Middle East. However, in India, where the northwest was ruled by Muslims from the eighth century, and the north Indian heartland from the thirteenth, Hinduism proved remarkably resilient, so that only perhaps 10 per cent of the population accepted the religion of the sultans. In sociological terms, most Hindus had a firmly entrenched higher tier of belief already, and were not inclined to change to another, Islamic, one. In our area of concern, the Indian Ocean littoral, there was no opportunity for pressure of any kind in most cases.

There is then a contrast between coastal Islam, and Islam inland, and also between areas where Islam is the majority or even only religion, as compared with areas where it is a minority. Put briefly, Islam reached the southern part of the Arabian peninsular, that is Yemen and Hadhramaut, very early, travelling to this region by land. Of the areas in the Indian Ocean that Islam reached by sea, we know that Muslims had arrived on the Swahili coast by the mid eighth century, though at first this was a matter of Muslim traders from the Red Sea and Hadhramaut visiting, and erecting a mosque for their use. Over time some of these Arabs settled, and some of their neighbours in the port cities of this coast converted to Islam. There is evidence of a similar process on the coasts of India occurring rather earlier. Insular southeast Asia came later, and here the religion was spread more by Muslims who themselves were relatively recent converts from India, rather than people from the heartland. Ross Dunn has put the contrast between coastal Islam and that of the heartland very well:

In the Middle East an individual's sense of being part of an international social order varied considerably with his education and position in life. But in the Indian Ocean lands where Islam was a minority faith, all Muslims shared acutely this feeling of participation. Simply to be a Muslim in East Africa, southern India, or Malaysia in the fourteenth century was to have a cosmopolitan frame of mind.

This was reinforced by the coastal location and the fact that most of them were traders, and so had to be aware of distant markets and people and places.48

We will now look at each area, that is East Africa, India, and southeast Asia, in turn. There has been considerable public interest in the date of the

first conversions, and the beginnings of an Islamic presence in East Africa. The record shows very clearly that there were trading contacts from the Arab world to East Africa before the beginnings of Islam. For the first century of the Christian era the *Periplus* mentioned quite extensive contacts between East Africa and Yemen, and also noted that there was extensive intercourse and intermarriage between these Arab traders and the locals. Pre-Islamic ceramics from the Middle East have been found in both Somalia and Mozambique. These are mostly Persian of the Sassanian period.49 As these traders converted, they kept on trading, to East Africa among many other places. The very earliest mosques, dating back perhaps to the mid or even early eighth century, were constructed to service these itinerants, some of whom may even have settled. They were very small, and made of non-durable materials: wood or wattle and daub.

The earliest Muslim accounts of East Africa reflect very clearly that the locals had not converted. The tenth century 'Wonders of India', a collection of Arab stories, describes 'Zanj' as a strange uncouth place, with sorcerers, cannibals, strange birds and fishes. Al-Biruni, in the early eleventh century, still finds East Africa a wild and largely un-Islamic place. It was from the later eleventh century that the locals were converted, and we can talk for the first time of a Swahili civilisation, that is if we follow Middleton and see a defining characteristic of the Swahili being that they are Muslims. In this century earlier wooden mosques at Kilwa were enlarged and constructed in stone. By around 1300 the main mosque at Kilwa was some 12 metres by 30 metres, implying a very large Muslim resident population. Wright has pointed out that all the larger communities seem to have accepted Islam at roughly the same time, that is primarily in the twelfth century and a few years on either side of this. 54

Conversion, even if 'partial', served to further distinguish the shore dwellers, the Swahili, from their inland neighbours. This coastal society, because of its location, was much more open to wider influences from across the Indian Ocean than were people in the interior; their acceptance of Islam is part of this greater exposure. Yet their new religion was heavily impregnated with pre-Islamic indigenous beliefs, as we will see presently.

Arabs had long traded with the Indian coast, and Indians with the Arab world. When the Arabs became Muslims they continued to trade, and conversions in littoral India occurred very early, long before Muslims ruled large areas of the inland subcontinent. An early Portuguese account of the process of conversion stresses that rigid Hindu caste divisions in Malabar led to many conversions among the lowest groups. Correia's account describes both the mix of trade and religion which proved so successful, and the way the Islamic stress on the equality of all believers fostered conversions, producing the indigenous Muslim Mapillah community. He described the dominance of the Nairs in this area, and the degraded position of the lower castes. Muslims, presumably from the Red Sea area given that this was the major trading area for Malabar, pointed out to the (Hindu) rulers that the low caste porters were unable to move about freely in the area, because if they ran into Nairs they would be killed. But if these low caste Malabaris converted to Islam 'they would be able to go freely where they wished, because once they became Muslims they were immediately outside of the law of the Malabaris, and their customs, and they would be able to travel on the roads and mingle with all sorts of people.' This argument, plus a few bribes, convinced the rulers, who gave their consent. The actual conversion of these much-oppressed people was easy, for they could then live where they pleased and eat what they wanted. They also received clothing from the Muslims. The result was a great success for this Muslim conversion drive, which in turn spilt over into trading success, especially in the spice trade to the Red Sea.55

Another very early Portuguese account makes clear that the Mapillahs by no means abandoned all their previous Hindu customs:

And in this land of Malabar there are Moors in great numbers who speak the same tongue as the Heathens of the land, and go naked like the Nayres, but as a token of distinction from the Heathen they wear little round caps on their heads, and long beards. . . . These follow the Heathen custom in many ways; their sons inherit half their property, and their nephews (sisters' sons) take the other half. They belong to the sect of Mafamede, their holy day is Friday. Throughout this land they have a great number of mosques. They marry as many wives as they can support and keep as well many heathen concubines of low caste. If they have sons or daughters by these they make them Moors, and oft-times the mother as well, and thus this evil generation continues to increase in Malabar; the people of the country call them Mapuleres. 56

Islam began to make converts in southeast Asia from the late thirteenth century (pride of place is usually given to Samudra in north Sumatra). Conversions en masse happened mostly from the later fourteenth century; in the second half of this century east Java was won over. Islamic states appeared during the fourteenth century, first in north Sumatra and then in coastal Java. From the mid fifteenth century Melaka was the focus of the conversion effort. At the end of our period, in 1500, Islam was well entrenched in coastal central and east Java, the Malay peninsular, the southern Philippines, and Sumatra. Converts to Islam were beginning to be made in Maluku, but in general Indonesia east of Java was still open. 57

The important conversion of the ruler of Melaka was briefly described by a Portuguese chronicler in an account which makes clear the merger of trade and religion. 'Some ships arrived at Melaka from the ports of Arabia, and one year there came a *caciz* to preach the law of Muhammad in these parts.' He was successful in becoming influential with the king, and impressed on him the grandeur of Islam. Conversion followed, and the king was honoured by being given the name of the Prophet himself. A little later in the fifteenth century, just before the arrival of the Portuguese, another chronicle described well the evolving situation in Sumatra, and again demonstrated the close link between trade and religion. The people of the interior were described as brutal, savage, cruel and warlike, and some of them were cannibals. But in the littoral areas people were Muslim. These people had been converted by Muslims who came to the area for commerce. They recorded the size of the area, and the existence of a religious vacuum, and were able to make many conversions because the locals wanted the goods of the foreign Muslims, and also as a result of marriages between foreign Muslims and local girls.

There have been many studies of what is denigrated as deviations from normative Islam. This is a dubious matter indeed. Scholars, often themselves not Muslims but rather western Orientalists, erect a scaffolding of 'pure' Islam, based on the Quran and such claimed fundamentals as the 'Five Pillars' of the faith. Islamic practice is then measured against this ideal yardstick, and deviations are roundly condemned as being un-Islamic or syncretic. Ironically, these rigid interpretations of Islam by westerners have

been joined in the last few decades by equally rigid and dogmatic interpretations by Muslim revivalists.

Studies of Islamic practice all around the shores of the ocean provide copious examples. Pouwels claims in a general way that on the Swahili coast up to the seventeenth century Islam was practised in adapted and internalised forms, remaining fundamentally local in outlook. Modern scholars of Islam in East Africa have discussed this important matter in a neutral way. They distinguish between dini, religion, and mila, custom. The former is book-based Islamic, while the latter is not. 59

Parkin took a more general view and commented that in Muslim communities all around the ocean 'the idea of prayer in the mosque connotes unambiguous Islamic piety, while that outside points towards the possibility of other kinds of worship.'60 Yet this division has often worried exemplars of the faith, who ever since coastal communities accepted Islam have been concerned to 'purify' practice and rectify deviations. These Islamic specialists travelled widely by sea across the ocean, and their activities show unity in the ocean in two ways: first, they themselves made up connecting links, and second, their activities, which continue to today, have slowly increased adherence to a more normative Islam all around the littoral. As we reach more recent times we have more detailed information on their activities, but even for the period covered in this chapter we can see them hard at work.

In our period there was a very wide circulation of religious specialists from the heartland to the littoral peripheries. Push factors several times led to an outflow of men from the Hadhramaut, and also from Oman to the east and Yemen to the west. Sharifs and sayyids, and other knowledgable people, were in great demand all around the shores of the ocean. They had knowledge of the shariah, or especially of the Shafi'i school which was dominant in the Indian Ocean: 'the law was the seal of oceanic unity on which the towns thrived'. They also had baraka, the aura of divine blessing. These sharifian families all traded, but also acted as judges, officials, sufis, and teachers. They moved to India after about 1200, and even today the 'Arab' community in Gujarat preserves stories of their Hadhrami origins. The flow to East Africa began after about 1250, and to Malaysia, Indonesia

and then the Philippines from 1300. Thus were created far-flung lineages, merchants and scholars mixed together, who had connections for both piety and pelf all over the ocean.

Stephen Dale's exemplary work on the Mapillahs of Malabar provides further detail. He points out that in this area, today called Kerala, Islam is of the Shafi'i madhhab, as compared with the Hanafi school of the Turkic–Persian rulers of the great inland empires. Scholars came to Kerala from Yemen, Oman, Bahrain, and Baghdad. Barbosa wrote about how many and how diverse they were:

There are many other foreign Moors as well in the town of Calecut, who are called *Pardesis*, natives of divers lands, Arabs, Persians, Guzarates, Curasanes and Daquanis, who are settled here. As the trade of this country is very large, they gathered here in great numbers with their wives and sons, and seem to have increased.63

From Kerala Islam flowed on, to southeast Asia, especially to the north Sumatran state of Aceh in the sixteenth century, and even to the Philippines. This contact was mediated through the port cities. 'The city in Southeast Asia furnished the crucial link between international Islam and the local Muslim community whose bonds stretched far into the rural interior.'64

These were powerful links indeed. However, we must be careful not to exaggerate the extent to which there was, in this time of still primitive communications, a really dense coming and going. Hadhramis certainly spread widely, but it is unclear how close were the ties they retained with their homeland in southern Arabia. Today they are close, but we cannot assume that this applied in an earlier period. So also we must not exaggerate the degree of commonality achieved at this time. We have copious data on divisions based on ethnicity, political power, and perceived adherence to Islam, from the early modern period, and no doubt these were important earlier also. Ibn Battuta is merely one example of a selfproclaimed expert from the heartland, or near enough, who had a pronounced air of superiority as he mingled with the indigenous Muslims around the ocean. His praise is reserved for those who like himself were Arabs from the heartland, and indeed he always commented on their presence, and praised them, while either ignoring or belittling the locals. Typical was his experience in the Kerala backwaters when he was travelling from Calicut to Quilon. The trip took ten days, and they anchored at night and stayed in villages. It was not a pleasant trip. 'There was no Muslim on board the boat except the man I had hired, and he used to drink wine with the infidels when we went ashore and annoy me with his brawling.' So also with Ibn Jubayr, who left us a long passage of invective against the black Muslims of the west shore of the Red Sea.65

There was another maritime connection which also served to solidify Islam, and create communitas amongst the very diverse community. This is the pilgrimage to Mecca. This was an absolutely central obligation for all Muslims who could afford the voyage. True, Muslims visited many other shrines also, some local and some widely known. As they travelled, Ibn Battuta, Sidi Ali Reis, and Ibn Jubayr all did lots of detours to drop in on holy places: tombs, mosques, madrasas and so on. But the hajj was overwhelmingly important.

When Muslims went to Mecca they were immediately impressed with the power and majesty of Islam. Thousands of pilgrims of very diverse ethnicities, social standing, wealth and age, spent some days engaging in common rituals. Returning hajjis stood out in their local communities as exemplars of the faith, and served to reinforce the work of the religious specialists whom we have just described in that they also strove, back home in their villages, to bring their kin folk closer to the normative Islam they had seen in the Holy Cities. Our data for all this is much more detailed for the early modern period, so we will reserve a full discussion for the next chapter. We do however have accounts of their hajjs from Ibn Battuta, and Ibn Jubayr, though interestingly both of these are more or less normative accounts of how they did the prescribed rituals, and give us very little impression of what it meant for them in a spiritual sense. Ibn Jubayr had a bad time even getting to the Hijaz from the west coast port of 'Aydhab in 1183:

The people of 'Aydhab use the pilgrims most wrongfully. They load the jilab with them until they sit one on top of the other so that they are like chickens crammed in a coop. To this they are prompted by avarice, wanting the hire. The owner of the craft will exact its full cost from the pilgrims for a single journey, caring not what the sea may do with it after that, saying, 'Ours to produce the ships; the pilgrims' to protect their lives.' This is a common saying amongst them.66

We have described several times the close connection between Muslim merchants and religion, trade and the faith, piety and pelf as an English observer once put it. Islam encouraged specific social and commercial attitudes and customs, some parts of Islamic law fitted well with trade, and with travel. We can now turn to mundane and material matters, and investigate the trade of the Indian Ocean in this period. Certainly we will find many Muslims involved, but this is not to be seen as an 'Islamic period', not even in the Arabian Sea, let alone in the eastern ocean and beyond to China.

There is a very extensive literature on the glamorous spice trade. More ink has been spilt on this than it objectively deserves, for it was a small part of the total. Yet it serves well to open a discussion of trade in the Indian Ocean in our period, for it was the prime example of a very long-distance trade. Where did the spices come from? In our period the main production area for pepper was Malabar, which produced perhaps some two-thirds of the Asian total, while other areas were in Siam (now Thailand), the great island of Sumatra and the Sunda Islands. Cinnamon came only from Sri Lanka, growing in a strip 20–50 miles wide and 200 miles long from Chilaw to Walawe on the west coast of the island. Nutmeg and its derivative mace came only from the six small Banda islands. Cloves grew on several small islands along the west coast of the larger Maluku island of Halmahera.67

There were several major nodal points for the spice trade before 1500. Increasingly in the fifteenth century the production of the Maluku islands was taken by local traders to the rising entrepot of Melaka. This was described by the Portuguese Governor Afonso do Albuquerque (1509–15): 'if there were another world, and another navigable route, yet all would resort to the city [of Melaka], for in her they would find every different sort of drugs and spices which can be mentioned in the world. . .'.68

Merchants from all over the Indian Ocean area and even further afield came to Melaka to buy spices and other products. The extensive trade to China was handled by Chinese merchants, and that to the west by a host of traders, many of them Muslims from a wide range of homelands. The dominant group may well have been those from Gujarat. A famous contemporary description, by the apothecary Tomé Pires, claimed that 'Malacca cannot

live without Cambay, nor Cambay without Malacca, if they are to be very rich and prosperous.' He also pointed to the route the spices took after Melaka, for he pointed out that 'Cambay [sc. Gujarat] chiefly stretches out two arms, with her right arm she reaches out towards Aden and with the other toward Malacca, as the most important places to sail to'.69 The usual route was for the spices and other products to travel to Calicut, from where they were taken either north to Gujarat and the great markets of northern India, or across the Arabian Sea to the Gulf and the Red Sea, from where they were distributed all over the Middle East and ottoman Turkey. Some of these spices in turn went through Egypt to Alexandria, where Italian merchants, especially Venetians, bought them for sale in Europe.

In the fifteenth century, and later, most Asian spices were consumed by Asians. India alone consumed twice as many fine spices as Europe. Of the total Asian spice production in 1500, Europe took at most one-quarter. China was a huge consumer of pepper, taking around 75 per cent of total southeast Asian production. Marco Polo wrote of Zayton [Quanzhou], which is

frequented by all the ships of India, which bring thither spicery and all other kinds of costly wares.... And I assure you that for one shipload of pepper that goes to Alexandria or elsewhere, destined for Christendom, there come a hundred such, aye and more too, to this haven of Zayton; for it is one of the two greatest havens in the world for commerce.

Later, a little more soberly, he claimed that for one ship that took spices to the west, to Aden and on to Alexandria, ten went north to China. 70 Roderich Ptak has done some intriguing estimates for the (admittedly rather minor) clove trade. Around 1500, total production may have been 6,000 bahars, (a bahar is about 210 kg) of which 5,000 went to Melaka, and of this 60–70 per cent was taken to the west by Gujaratis. Europe took about 300 bahars, or a mere 5 per cent of the total. 71

Asian trade in spices was a well-integrated one. For example, the great trade centre of Melaka and the great production centres in the Malukus both lived on imported food. Many other products, notably cloths from India, were woven in to the woof and warp of this trade. The profits could be very high, despite taxes in some trans-shipment areas and frequent losses from

storm and shipwreck. In the fifteenth century a kilo of pepper cost 1–2 grammes of silver at the production point, 10–14 in Alexandria, 14–18 in Venice, and 20–30 for the European consumer. But costs and taxes were high, so the Venetians, the main European traders, made a profit of only about 40 per cent. There were indeed huge margins: early in the sixteenth century traders made 400 per cent profit taking pepper from Melaka to China. In Calicut mace cost twelve or fifteen times the cost of production in the Banda Islands, and nutmeg thirty times.

There was a range of other high-value products traded over long distances. One example is ambergris, a concretion in the intestine of the sperm whale which is grey at first, and develops a fine smell rather like musk after it changes colour. This rarity was used by the elite in perfumes and incense. Precious stones are another example. In the fifteenth century it was considered that rubies from Ava were better than those from Sri Lanka. Diamonds came from Vijayanagar and Berar. The important production centre of Sri Lanka sent sapphires and emeralds to Calicut. Fine porcelain came from China. Pearls were another luxury trade item. It was considered that pearls from the Gulfs of Mannar and Persia were best. Marco Polo wrote about the former. He reported that the water was only some ten or twelve fathoms deep (about 20 metres), and men dived from small boats to a depth of between 4 and 12 fathoms, and stayed down as long as they could. This diving was done only in the months between the monsoons, that is in March and April. The king took a tax of one-tenth of all finds. 72 A century later, in 1330, Ibn Battuta at Bahrain left a description from which it seems that techniques then and in more recent times have changed very little.73

Most of the port cities were more or less monetised by this time, and we have occasional hints of an extensive trade in gold and silver, both coin and silver. This trade changed dramatically once American gold and silver appeared in the second half of the sixteenth century. It has been estimated that around 1500 at least 1,750 kg of gold, equivalent to 20,500 kg of silver, flowed from Europe to the East, this being about one-quarter of total European production.

The major gold producing area around the Indian Ocean was located in Zimbabwe. Production began slowly at the start of the tenth century, or perhaps earlier, and was at its height in the eleventh to fifteenth centuries; it then declined drastically. At first placer mining, that is washing from alluvium, was most common, but later quite sophisticated reef mining techniques were also employed. This gold was exported through Sofala but marketed at Kilwa, up to 10 tons a year before a decline late in the fifteenth century. A well-informed Portuguese claimed in 1506 that when the land was at peace at least one million, and up to 1.3 million maticals of gold were exported each year from Sofala, and maybe 50,000 from Angoche, this then totalling a little under 6,000 kg.74

It may be that another form of currency was equally as important, namely cowry shells. These are a species of marine snail, and while there are several different types the one used as currency in the Indian Ocean and over much of coastal Africa was the 'money cowrie', a 2.5 centimetre yellow species. The best came from the Maldives, as these were smaller than most and so easier to transport. Their value was not affected by their size. At first sight an eccentric choice for a unit of currency, they had several important advantages. They were very durable, and they could not be counterfeited or melted down. They also had an aesthetic appeal which may be lacking in precious metals. They can be beautifully striped, and their Latin name, Cypraea moneta, reveals another aspect of their appeal. The first part of the name comes from 'Cyprus', thought to be the home of Aphrodite, or Venus, the goddess of fertility, and the long, slender orifice of the shell's underside is very like a vagina. Ibn Battuta described how they were produced. The shell fish were harvested from the ocean, and then put in pits until the flesh had dissolved leaving only the shell.

These remote and otherwise quite obscure islands produced a good which was widely traded all over the ocean and beyond to Africa and China. There was an extensive trade in them to Yunnan from the ninth century, some done overland and some by sea via eastern India and southeast Asia, where in both places they were much in demand as currency. Again Ibn Battuta's account is revealing. The inhabitants of the Maldives sold them for the common currency, the dinar, or in exchange for rice from Bengal, or to

Yemenites who used them instead of sand for ballast. Later in his travels he found them in Mali and Gao in West Africa.75

The trade in slaves represents another extensive and high-value item of exchange. This trade, using 'product' from East Africa, began in earnest in the eighth and ninth centuries, though Zanj, that is African, slaves are first mentioned in Sassanian Persia, shortly before Islam in the early seventh century. The most important trade was from East Africa to the Abbasid capital of Baghdad from the eighth to the tenth centuries, where they were used to perform backbreaking work draining and controlling the marshes south of Baghdad in the Tigris-Euphrates delta. The trade expanded greatly, until the huge slave revolt of 868–883, which contributed to the decline of the Abbasid empire. However, the trade to the Middle East continued.

Other African slaves were found even further afield. Habshis, that is a corruption of the Arabic Habash, or Ethiopian, were being sent to India at least from the early thirteenth century, while Arab traders brought them to China in Tang and Sung times. Slave trading was widespread in southeast Asia also, though here using local people rather than those from far-away Africa. 76

We have been writing about luxury long-distance trade, and indeed this was important, but it was by no means dominant. As one example, much has been made of finds of Chinese porcelain in various Middle East sites in the period from the eighth to the fourteenth centuries. Yet these products from far away are very minor, representing less than 1 per cent of total finds. Nor do these rare finds show that Chinese traders came to the Middle East in any numbers: rather, the porcelain took part in the relay trade from port to port, proceeding by stages and passing through many hands. 77

These relay trades were very complex indeed, linking small production and exchange locations with the great port cities. One could study this theme in any area around the ocean, but East Africa can stand as a type case, to give some impression of the complexity of items traded, and of the cosmopolitan trading community in Malindi. The Muslim inhabitants

are great barterers, and deal in cloth, gold, ivory, and divers other wares with the Moors and Heathen of the great kingdom of Cambaya; and to their haven come every year many ships with cargoes of merchandise, from which they get great store of gold, ivory and wax. In this traffic, the Cambay merchants make great profits and thus, on one side and the other, they earn much money. There is great plenty of food in this city, rice, millet, and some wheat which they bring from Cambaya. 78

Porcelain, precious stones, spices are the sorts of trade items which have left records or remains behind. However, much more basic things were traded. The two most essential were food and water. In the case of Hurmuz, Ibn Battuta wrote that 'On this island [of Jarun] water is an article of price; it has water-springs and artificial cisterns in which rain-water is collected, at some distance from the city. The inhabitants go there with waterskins, which they fill and carry on their backs to the sea [shore], load them on boats, and bring them to the city.'79 Mozambique similarly had to 'import' its water.

There was a very extensive trade in foodstuffs, especially rice. Several of the great port cities produced almost no food for themselves. Melaka and Hurmuz in the fifteenth century both had very large populations, maybe up to 50,000. It is revealing that in the former there was no land tax, such was the lack of significance of agriculture. All of Melaka's rice came from Pegu, Java and Siam. 80 Hurmuz got its necessities from far afield: rice from Chaul and other places, grain from the Punjab via Sind, and grain also from the Persian mainland. Rope, iron and coconuts came from Kerala, wood from East Africa.81 Aceh got supplies from Pegu, Bengal, Arakan and Sumatra. From the great inland state of Vijayanagar rice was exported to the coast, to Sri Lanka and the Gulf. Bengal and Pegu supplied rice to western Indo-China, Sumatra, Sri Lanka and the Maldives. There was even an extensive exchange of new varieties of food crops. African types of millet went to India, and southeast Asian crops like sativa rice and bananas to East Africa. A final necessity item is mangrove poles from East Africa. Mangrove is a very hard, dense wood, heavier than water and termite-resistant. It has always been cut to a standard length of 2.6 metres. It has been used in building in the Red Sea, southern Arabia and the Gulf from the tenth century: the Lamu area and the Rufiji delta were vast lumber yards.82

Some products were traded over very long distances indeed. In the thirteenth century date honey was produced in Bahrain and was much in demand in China by Buddhist pilgrims travelling to India. The great

Chinese admiral Zheng He brought back to Beijing several giraffes, including one from Malindi and one from Bengal, the latter having apparently been given to the ruler of Bengal, Saifu'd-Din, by the ruler of Malindi.83 Most extraordinary, and mysterious, was the discovery in 1944 by an Australian radar team of five Islamic copper coins from Kilwa on a beach in the remote Marchinbar Islands, part of the Wessell Islands off Australia's Northern Territory coast. None have dates, but from the inscriptions two may be tenth century, and three early fourteenth. We have no idea how they managed to travel clear across the whole Indian Ocean.84

Long-distance trade was governed by the monsoons. One example was a route from the Gulf region to China around 1000 on the longest voyage sailed by any one ship. The Arab geographers claimed that a passage from Oman to China took about three months and ten days, though one exceptional voyage was completed in 48 days. These sound extraordinarily rapid, but they are only sailing times. Several stops were necessary on the way, partly to trade, and partly to wait for the right monsoon, so that the actual time from leaving the Gulf to reaching Guangzhou (Canton) was at least six months. The dhows sailed down the Gulf before it became too rough, in September or October, and then went on to Malabar on the northeast monsoon, arriving in mid December. They stayed there while they traded, and waited for the cyclone season in the Bay of Bengal to end. In January they sailed to Malaya, and used the last of the northeast monsoon to get around the straits of Melaka and so catch the southern monsoon in the South China Sea and reach Guangzhou in April or May. The return voyage began in October to December when the northeast monsoon took them back to Melaka and over the Bay of Bengal to the west coast of India. The last stage, back to the Gulf, was sailed using the beginning of the southwest monsoon, reaching home around mid year.85

Another example comes from five hundred years later. Very early in the sixteenth century Barbosa left us a compelling description of one of the major long-distance trade routes of this period, that is from Malabar, specifically Calicut, to the Red Sea. He wrote that the Muslim traders in Calicut from the Red Sea and Egypt:

took on board goods for every place, and every monsoon ten or fifteen of these ships sailed for the Red Sea, Aden and Meca, where they sold their goods at a profit, some to the Merchants of Juda, who took them on thence in small vessels to Toro, and from Toro they would go to Cairo, and from Cairo to Alexandria, and thence to Venice, whence they came to our regions. These goods were pepper (great store), ginger, cinnamon, cardamons, myrobalans, tamarinds, canafistula, precious stones of every kind, seed pearls, musk, ambergris, rhubarb, aloes-wood, great store of cotton cloths, porcelains, and some of them took on at Juda copper, quicksilver, vermilion, coral, saffron, coloured velvets, rosewater, knives, coloured camlets, gold, silver, and many other things which they brought back for sale in Calecut. They started in February, and returned from the middle of August up to the middle of October of the same year. In this trade they became extremely wealthy. And on their return voyages they would bring with them other foreign merchants who settled in the city, beginning to build ships and to trade, on which the King received heavy duties. 86

These two accounts point to a major change in the structure of long-distance sea trade in our period. Barbosa was describing a trade divided at south India, while the first account sketched a direct passage from the Gulf to China. What happened is that around the eleventh century the trade became segmented, with one merchant and ship doing the Arabian Sea part to south India, where the goods were exchanged, and then taken on by other ships and merchants to southeast Asia, where there was another exchange, and so to China. South India was always a place where there was a halt, and exchange, but the difference is that in the earlier time the same merchant and ship kept going beyond there, while later they did not.

In the earlier period, from say the eighth century, the very long distance trade from the Gulf to China was handled by Persian merchants. In the Gulf Siraf, on the east bank, was the main centre, where were to be found goods from all over the Indian Ocean, including East Africa. Later Julfar, on the west coast up from Hurmuz, was important, and later still Hurmuz. Another old centre was Daybul, in present day Pakistan. Arabs also took part in this trade, and soon became more important than the Persians. Later some Chinese ships also, from the twelfth century and particularly in the fourteenth, traded into the Arabian Sea. However, from around the eleventh century the direct passage from Baghdad to Guangzhou declined, and we see the rise of emporia, that is shorter routes connecting the major port cities of Baghdad, Hurmuz, Cambay, Calicut, Melaka and Guangzhou, with many minor routes from, say, the Bay of Bengal feeding into this network.

What evolved then was a basic change in the orientation of long-distance trade, which in the earlier period was on an east—west axis, from Baghdad to Guangzhou, and later was more north—south, that is Baghdad down to India, then an east—west segment to southeast Asia, and then north—south again up to China. We can even see here an early version of today's divide between north and south, for the north, India and China, provided manufactures like cloths and porcelain, and the south unprocessed tropical products such as ivory, slaves, gold and spices.

From the twelfth century or slightly later we have three segments: the Arabian Sea, the Bay of Bengal, and the South China Sea. Chinese and Indians went to Melaka, Persians and Arabs only to India. It is significant that the account by Wang Dayuan, who travelled extensively in the 1330s, finds a western ocean and an eastern one, with the division at the Straits of Singapore.87 This important move towards segmentation may have been a result of traders realising that the direct passage in the same ship was inefficient, given that they had to wait for monsoons at several places, but it was probably also a result of the rise of important Indian trading communities in south India associated with the powerful Cola dynasty. We will turn to the influence of politics on trade presently, but we can remember here that the wealth and stability of the Abbasid empire from 750 CE, and of T'ang China, 618–907, certainly fostered this long-distance and quite perilous trade. The effects of the rise of the Cola empire in South India from the late ninth century has been less investigated, but it may be that the Colas, and the powerful merchant organisations, akin to guilds and associated intricately with state power, had two results. First, the stability provided by this state had the same effect as the equivalent in Baghdad and Guangzhou, that is a wealthy and stable state which had a large demand for foreign luxuries, and second merchants based in this state could trade both east and west, and especially to the east, to southeast Asia, where they met up with the powerful Sumatran-based trading empire of Srivijaya, which benefited from controlling the Melaka Straits up to the thirteenth century. South India seems to act as a fulcrum in this very long-distance connection. Later in our period other Indians joined in, this time Muslims based in the many emporia on the west coast, and in the major Islamic state of Gujarat from the thirteenth century. Increasingly the trade beyond India was

controlled by Indian Muslims, while Arabs, and a few Persians, were restricted to the Arabian Sea.

We can start our survey of routes, trade and ports in the east, in China. We have noticed that Chinese products, especially porcelain, were traded all around the Indian Ocean from very early times. We have already quoted Ibn Battuta's valuable description of the ships he saw in Calicut (see pages 70–1). His account dates from the early fourteenth century, but Chinese products have been found in the Arabian Sea from much earlier. Chinese pottery has been found on the Swahili coast from at least the eighth century, and a little later in Mauritius also. These goods were transshipped many times in a relay fashion, and some no doubt came overland to the Gulf and then were sent on by sea. An actual Chinese trading presence seems to date only from the twelfth century.

Many of the vast Chinese ships had both economic and political functions. We refer to the famous tribute system. Ostensibly this was a matter of foreign rulers accepting the superiority of the Chinese emperor, and sending tribute to signify this. However, much of the tribute was actually trade items, and the system then was a method of fostering exchange as much as a matter of political dominance. In the later thirteenth century the new Mongol dynasty, the Yuan, was keen to expand trade. In 1286 either the sons or younger brothers of the rulers of ten kingdoms ranging from Malabar to Sumatra came to pay tribute.88 Marco Polo got part of the way back home accompanying one of these politico-trade missions. Around 1290 a Mongol princess was sent by sea to Persia to become the consort of the local ruler, Arghun Khan, and the Polos went with her. She travelled with 600 sailors and officials, in a fleet of fourteen ships. They left from Zaiton, of which more in a minute, and touched at Champa and the Malay peninsula. Reaching Sumatra, they were forced to wait for five months to avoid monsoon storms. They then travelled near the Nicobar Islands to Sri Lanka, the west coast of India, and so to Hurmuz. However, Arghun had died by this time, and the princess was handed over to his son, Mahmud Ghazan, instead. This sort of voyage has been described in Chinese sources also. They said that it took forty days to get from China to Sumatra. One spent the 'winter' there and then took thirty days to get to the Malabar coast.89 This information again points to the good sense of the rise of the emporia trade, which meant that ships travelled shorter distances and did not have to wait for a change in the monsoon. Rather they could sell their goods and return home.

Kulke claims that in the thirteenth century there was a large Indian settlement, complete with temple, in south China, and Chinese settlements in Cola south India. O Chinese traded to India, but it seems that many more Indians traded to China. Indeed Polo makes clear that Indian traders had by his time replaced Arabs and were an important community at the main Chinese port, which now seems to be Zaiton, that is modern Quanzhou, rather than Guangzhou (Canton). In a famous passage he wrote that Quanzhou is

frequented by all the ships of India, which bring thither spicery and all other kinds of costly wares. It is the port also that is frequented by all the merchants of Manzi [the surrounding province], for hither is imported the most astonishing quantity of goods and of precious stones and pearls, and from this they are distributed all over Manzi.

Much later, when he got to Malabar, he again wrote, 'Ships come hither from many quarters, but especially from the great province of Manzi. Coarse spices are exported hence both to Manzi and to the west'.91

Quanzhou was located north of the modern port of Amoy, or Xiamen, opposite Taiwan. Muslims had traded there very early on, even from the seventh century, and in 1350 there were six or seven mosques in the town. 92 Among the products they imported was rhinocerous horn, which establishes a connection between East Africa and China. Fujian merchants began to venture out only from the late tenth century. Indian merchants had been in Guangzhou by at least the early sixth century. 93 From the twelfth century the Kling merchants from south India began to concentrate on Quanzhou, where in the mid fourteenth century they built a large Siva temple modelled on that back home in Madurai. By this time however Chinese traders were taking over the trade between China and Melaka from both Hindus and Muslims. This trade may have been fostered by the awe-inspiring state-directed expeditions of the eunuch Zheng He, to whom we must now turn.

Zheng He erected a tablet which gives a flavour of his pride and sense of superiority. He had inscribed:

We have traversed more than one hundred thousand li of immense waterspaces and have beheld in the ocean huge waves like mountains rising sky high, and we have set eyes on barbarian regions far away hidden in a blue transparency of light vapours, while our sails, loftily unfurled like clouds day and night, continued their course [as rapidly as] a star, traversing those savage waves as if we were treading a public thoroughfare....

This chauvinism is reflected even more in another inscription, where he claims that during his voyages 'those among the foreigners who were resisting the transforming influence of Chinese culture and were disrespectful, we captured alive, and brigands who indulged in violence and plunder, we exterminated. Consequently the sea-route was purified and tranquillised and the natives were enabled to pursue their avocations.'94 So also with many modern authors: Mills claims in his introduction to Ma Huan's account of Zheng He's 1433 expedition that the representatives of sixty-seven foreign states, including seven kings, came to China to pay tribute and render homage. At this time, at the height of Ming power in the 1420s, Yong Le's fleet had 400 warships of the fleet, 2,700 coastal warships, 400 armed transports, and the pride of the Ming fleet, 250 treasure ships, each carrying 500 men. Throwing caution to the wind, Mills enthusiastically claims that 'China enjoyed a hegemony over a vast arc of land which extended from Japan to the east coast of Africa.'95

Comparisons have often been made with Portuguese activities at the same time in the early fifteenth century. When the Chinese were travelling all over the Indian Ocean, say in 1422, the Portuguese had not even got to Cape Bojador, 26° N. Zheng He's greatest ships were 400 feet long, while Vasco da Gama's were between 85 and 100 feet. Many senior historians have speculated that Zheng He's fleets had the ability to round the Cape of Good Hope (indeed maybe they did) and proceed north to discover western Europe. World history would have been stood on its head.

The reality is a little less exciting than this. There were a total of six expeditions between 1403 and 1433, sponsored by the Yong Le emperor of the Ming dynasty. These vast fleets travelled all around the littoral of the Indian Ocean, going as far as Jiddah, and far down the Swahili coast. Each had between 100 and 200 ships, and forty to sixty of these were the famed huge treasure ships, which could be 150 metres long. There were maybe

27,000 men in each fleet. However, most of the ships were much smaller, some for example being water carriers. Barker tentatively claims that even the size of the great treasure ships has been enthusiastically overestimated: they may have been only about 230 feet long (though this is still very large for the time). They are to be seen as a continuation of the tribute system, with its characteristic mixture of tribute and trade. However, the fleets also engaged in essentially pedling trade in the Indian Ocean, that is, they took goods from one place to another quite apart from any association with tribute. They took southeast Asian sandalwood and Indian pepper to Aden and Dhofar, Indian pepper to Hurmuz, sandalwood and rice to Mogadishu, and rice, probably from Bengal, to the Maldives. 97

Perhaps the most important point is that Zheng He (perhaps understandably) has bewitched historians, and led to their ignoring three important matters that place his voyages in context. First, his activities were really a continuation of a long tradition, albeit writ large. Second, the tribute system, so-called, hardly meant Chinese suzerainty all over the Indian Ocean. Third, for much of the time the expeditions engaged in humble Indian Ocean trade alongside many other merchants. We described Ibn Battuta and Marco Polo travelling in private, and very large, Chinese ships, and generally Chinese merchants, often ignoring official prohibitions on overseas trade, dominated the trade from their coast to southeast Asia, and at least up to the middle of the fifteenth century, well after the end of major state expeditions, participated fully in trade from Melaka to the west coast of India but not beyond.

Overall then Chinese merchants, and state expeditions, played a rather small and transient role in the Indian Ocean proper. We can now turn to a discussion of ports, routes and traders in the Indian Ocean up to about 1500.

There are several ways to categorise ports around the Indian Ocean at this time. Some owed much to geography, either because they were located on choke points, or because they had productive hinterlands. Some were pure exchange centres, others had some industry of their own. Some were subordinate to a larger inland state, while others were port city states, or perhaps, to borrow the southeast Asian term, port polities. We noticed earlier that port cities have connections with the near interior, that is the

umland, with their hinterland, and with their foreland, that is the areas of the overseas world with which the port is linked through shipping, trade and passenger traffic. It is this characteristic which means that port cities by definition are cosmopolitan, much more so than the inland. The visitors are very different from inland peasant populations. These are

some of the most enterprising and dynamic individuals, people whose horizons have been broadened by time and exposure, whose skins wear the deep hue of the 'tanning of travel.' They bring awareness of an enlarged macrocosm to their host community, transfusing resident populations with new ideas in the give of foreign expertise and the take of local hospitality. 98

Where were the major port cities in the Indian Ocean area in our period? We should start in East Africa. In the far south, Sofala provided gold and ivory from the far interior. The gold was mined or washed in the inland Mutapa state in present day Zimbabwe and brought to the coast to be exchanged for cloth and other manufactures from India and the Middle East. To the north, Kilwa was the great emporium on the coast between roughly 1250 and 1330, from which time date a great mosque and palace, the latter being the largest roofed stone building south of the Sahara until modern times. By 1500 the greatest port city was Mombasa, an important centre of exchange of ivory and gold from the south for manufactures from the west and north. Malindi was a smaller centre at this time, but Mogadishu benefited from its proximity to the Red Sea and Hadhramaut to be another important port. All of these ports on the Swahili coast were autonomous politically, and indeed engaged in much competition and even conflict with each other. The only substantial interior state at this time was the Mutapa empire, and its sway ended far from the coast. None of them were important centres of production: rather they acted as outlets for export goods from the interior, gold and ivory especially. Consequently connections with the interior were of crucial importance. Yet here and elsewhere the major products traded were humble bulk goods carried along the coast in a myriad of small dhows: mangrove poles, cheap cloth, food, even water.

Moving along the coast, Aden was usually a great port city because of its location at the entrance to the Red Sea. It was also very much an exchange centre or echelle, for it was almost an island, cut off as it is from the inland

by the mountains which surround it. It had no hinterland. There were several ports within the Red Sea, but the greatest certainly was Jiddah. It had been a major port for many centuries, occasionally helped by government policy. In 1429 the Mamluk sultan even decreed that spices from the east could only be sold in Jiddah, and only to his agents. 99 In that century the port was known to the Arabs as the 'Bride of the Red Sea'. 100 Portuguese accounts of trade before their arrival make clear Jiddah's central role. Barros wrote that it was the major focus of the spice trade, saying that Jiddah, with its buildings, trade and commerce, and because almost all the ships that come from India call at it, 'is the most celebrated and noble settlement of all this Arabian coast inside the entrance', and added that 'most of the residents of that city [Jiddah] were merchants, because of the merchandise that flowed through it, both entering and leaving'.101 Elsewhere he described how the goods came down from Cairo, and the ships called at Jiddah. From there the goods went off to the Arabian Sea directly, not calling at Aden, with their times of sailing determined by the monsoons. They left the Red Sea 'in the months of navigation, when the westerlies prevail', and came back with the easterlies. 102

The situation in the Gulf varied over time. At the beginning of our period, when the Abbasid empire was flourishing, the largest ships could not reach Basra, let alone Baghdad, because the estuary and the delta of the Tigris-Euphrates were very difficult to navigate. For a brief time, the first half of the tenth century, Sohar was an important port, with contacts up the Gulf and across to Africa. After it was sacked by the Buyids from Oman it was replaced by Siraf, on the east coast of the Gulf south of Shiraz, where large boats were unloaded and their goods taken in smaller ships to the great cities further north. Going south, ships went from Siraf to Muscat and Sohar, then either to Daybul or ports in Malabar, then around Sri Lanka to Melaka, up to Hanoi, and then to Guangzhou. Typically, this trade was at first handled in its entirety by Muslim traders, some Persians but increasingly Arabs, and from about 1000 became more segmented, with Chinese coming some of the way, and Indians also involved as goods were trans-shipped and sold on at one or other of these great echelles. 103 The other great port in the Gulf in late Abbasid times, in the eleventh and twelfth centuries, was Qeys, Qais or Kish, on a small island down the Gulf from Siraf. Here Indians brought in spices, people from Yemen, Iraq and Fars provided silks and cloths, wheat, barley and millet. There was also a large slave trade, and ivory, gold, wood, skins and ambergris from East Africa. Horses were sent out to the Deccan. Pearls were another export from this major port, while there have been many finds of Chinese ceramics.

Hurmuz, located on the choke point at the entrance to the Gulf, was always an important exchange centre, but rose to greater prominence in the fifteenth century. Most of these great marts were independent of any exterior political authority at this time. They acted as major centres for the exchange of Middle Eastern and even European goods for products from all over the Indian Ocean area. Located on barren foreshores, and deficient even in water, let alone food, most had no major productive role, nor extensive hinterland. Rather they were hinges linking areas to the north with those to the south and east.

As we move southeast from the Gulf we begin to find variations on this pattern. Ports in the area around the Indus delta, the first part of South Asia to be conquered and converted to Islam, drew on a large and quite productive hinterland. Daybul, or Bambhore, at the mouth of the Indus, was a very old emporium which declined from the eleventh century as a result of silting. It was replaced by Lahari Bandar, but then there was also a major port at Thatta from the fifteenth century, located no less than 200 kms up the river from the coast.

The great ports of Gujarat were certainly important centres of exchange, but they were located on the maritime fringe of important production centres for such products as indigo, saltpetre, and especially a vast variety of cotton cloths. Indeed, some of the manufacturing process was done in these very port cities. In our period the greatest port was Cambay, at the head of the Gulf of Cambay. This, like many other ports within and around the gulf, was not an independent city state: rather it was part of the important Muslim sultanate of Gujarat. Here were huge volumes of trade, skilful merchants, and a very well articulated network of production and exchange and credit. For such ports, that is those with productive interiors, connections with the land were obviously crucial, as compared with say

Aden and Hurmuz, which being dependent on the exchange of products from all over the Indian Ocean, but not from their interiors, were less concerned about what happened directly inland from them.

The ports further down India's west coast were less important, in part because the interior was less productive. The next major group of port cities were in Malabar, now the Indian state of Kerala. The dominant port here was Calicut, ruled by a powerful and independent ruler, the Samudri raja or Zamorin, and a market not only for a host of 'foreign' goods but also a great collection and distribution centre for the pepper which was harvested in abundance in the interior. Several other port polities were important at different times in this region. One of them was Cranganore, some 15 miles landwards from the seashore and located on several rivers. A vast array of merchants there dealt in spices. 104 None of these Malabar ports were centres for manufacturing, yet neither were they merely exchange centres. In these cases location (they made obvious stopping places for trade from west to east and back again) joined with an interior where much pepper was found to ensure that for many centuries there would be major ports in this region.

This also applies quite exactly to Sri Lanka, and its major port of Colombo, for its location paralleled that of the Malabar ports, while the island was the only place where true, fine, cinnamon was produced. Moving around to the Bay of Bengal, toward the end of our period the major ports included, on the Coromandel coast, Pulicat, which drew on production, especially textiles, from the great Hindu kingdom of Vijayanagar, but was little affected politically by it. In Bengal the most important port was Chittagong, which similarly was little controlled from the political centre of Gaur. The last major port of which we need to take account was Melaka, located along the coast from modern Singapore, which rose to prominence in the fifteenth century both as a great trade centre, maybe the greatest of all in the second half of this century, and also as a dissemination centre for Islam. In this great mart were found products from all over the Indian Ocean and far beyond: Chinese silks and porcelains, Indonesian spices, textiles from India, and a host of European products also. Melaka functioned as a pure exchange centre. Local products, let alone local manufactures, were of very slight account. It was the great hinge in Indian Ocean trade at this time,

connecting up what could be called the 'larger' Indian Ocean, which would include the South China Sea on one side, and the Mediterranean on the other.

We now move on to consider the merchants who made these ports what they were. A merchant is a person who exchanges one good for another, or buys a good for money with the intention of selling it on to someone else. It would be tedious and pointless merely to list a confusing array of merchants in each port city. Rather, I will concentrate on the main communities, and attempt to describe the role of merchant communities in general rather than in specific terms. Some merchants were permanently located in a particular market place, though the goods they dealt with could come from far away. Others travelled widely, chaffering their way all around the shores of the Indian Ocean.

In our discussion of merchants we can use, with care, evidence from the very early Europeans at the start of the sixteenth century. These men were concerned to understand how things worked in the Indian Ocean the better to participate, or even control, and so they left valuable accounts of what they found around 1500. Certainly they were impressed with the merchants they met in Gujarat. As a merchant from Florence commented in western India in 1510,

We believe ourselves to be the most astute men that one can encounter, and the people here surpass us in everything. And there are Muslim merchants worth 400,000 to 500,000 ducats. And they can do better calculations by memory than we can do with the pen. And they mock us, and it seems to me that they are superior to us in countless things, save with sword in hand, which they cannot resist. 105

A famous early Portuguese observer, Tomé Pires, at about the same time said that

They are men who understand merchandise; they are so properly steeped in the sound and harmony of it, that the Gujaratees say that any offence connected with merchandise is pardonable. Those of our people who want to be clerks or factors ought to go [to Gujarat] and learn, because the business of trade is a science in itself which does not hinder any other noble exercise, but helps a great deal. 106

We are often told that the trade of the Indian Ocean in our period was increasingly handled by Muslims: the ocean was a 'Muslim lake'. And to be

sure there is much truth in this. Nor is this a matter for wonder, for Islam had spread from the heartland of the Red Sea all around the Indian Ocean over water. One would predict then that coastal people were most likely to be converted first, and indeed this was the case. However, there was an important change during our period, for while earlier it was Muslim Arabs from the Red Sea and Egypt who dominated Indian Ocean trade and its markets except perhaps for Calicut, later it was local converts from such coastal areas as Gujarat and Bengal, and Middle Eastern Muslims who often had migrated to the Indian Ocean area, who had the cream of the trade, especially that going past India to the Bay of Bengal and beyond.

A brief tour around the markets which we have just listed will make this clearer. On the East African coast the coastal trade was done by local people, the Swahili, who had been converted to Islam in the twelfth century. These men also acted as brokers, connecting the interior with overseas markets. They seem to have been in a particularly, and atypically, advantageous situation. Over most of the Indian Ocean and its interior use values were relatively constant, so that a preciosity would be valued much the same wherever one was. However, this was not the case in the African interior. Gold and ivory were produced there, but these items had little value in their originating societies; cloth and glass beads did. The situation was reversed in the overseas areas of India and the Middle East. This happy situation gave the Swahili brokers who made the connection between these two different use value areas a great advantage, and they profited from it, as the wealth of Kilwa at its height in the fourteenth century makes clear. 107 Much of the overseas long-distance trade was handled by Muslims from the Hadhramaut and Yemen, and they were important people in the Swahili port cities; indeed many of the rulers were descended from, or married to, merchants from further north. However, there was also a sizeable Hindu presence, men from Gujarat who came in with the seasons and, unlike the Muslims, did not settle.

Hindus were also to be found, this time often settled, in the great market of Aden, and indeed further into the Red Sea, but obviously this area was dominated by Muslims, in this case Arabs. Yet earlier in our period Jewish Karimi merchants played a major role in the Egyptian Mamluk state and the

Mediterranean in general. Around 1100, as Goitein has shown, they were major participants in Indian Ocean trade. So also in the Gulf, where in the tenth century in the briefly important port of Sohar there was a large Jewish community. However, the main traders here were Ibadi Muslims from Oman, who ventured to ports all around the Arabian Sea. 108 At its height Siraf had some fabulously wealthy merchants. In the early twelfth century Abul Qasim Ramisht, who traded as far as China, was very wealthy. The silver plate his family ate out of reputedly weighed about one ton. 109 Later in our period in the Gulf, Hurmuz was one of the great cosmopolitan cities with a great variety of traders: some Europeans and Hindus, Muslims from various areas, but the majority of them local, that is Persians. In Gujarat the interior trade, and the domestic markets, were largely controlled by Hindus and Jains, and they also engaged in oceanic trade to an extent. However, more important were a bewildering variety of Muslims: local people, Persians, still some Arabs, others from Bengal. Both here and in Calicut it seems that the long-distance trade was handled mostly by 'foreign' Muslims, who were able to draw on far-flung family connections, while local converts were more likely to engage in coastal and inland trade. Around the corner, on the Coromandel coast, we find a larger role for Hindu traders, especially klings, who were south Indian Hindus more correctly called Marakkayars. Some members of the community had converted to Islam, and were known as chulias. 110 Bengal, however, had an important Persian merchant community. Melaka, as the greatest market, had the greatest variety of merchants: all sorts of Muslims, and Hindus from both Coromandel and Gujarat, plus local people from the Malay world, most of them now Muslim, and of course Chinese traders.

What was the position of these merchant communities in these great markets? Ibn Battuta again will provide an entrée to the topic. He left several detailed accounts which show the typical situation. In 1330 he arrived at Mogadishu:

It is the custom of the people of this town that, when a vessel reaches the anchorage, the sumbuqs, which are small boats, come out to it. In each sumbuq there are a number of young men of the town, each one of whom brings a covered platter containing food and presents it to one of the merchants on the ship, saying 'This is my guest,' and each of the others does the same. The merchant, on

disembarking, goes only to the house of his host among the young men, except those who have made frequent journeys to the town and have gained some acquaintance with its inhabitants; these lodge where they please. When he takes up residence with his host, the latter sells his goods for him and buys for him; and if anyone buys anything from him at too low a price or sells to him in the absence of his host, that sale is held invalid by them. This practice is a profitable one for them. 111

A little later he arrived in Zafari, that is Khafar or Dofar, in southwest Oman:

The population of Zafari are engaged in trading, and have no livelihood except from this. It is their custom that when a vessel arrives from India or elsewhere, the sultan's slaves go down to the shore, and come out to the ship in a sumbuq, carrying with them a complete set of robes for the owner of the vessel or his agent, and also for the rubban, who is the captain, and for the kirai who is the ship's writer. Three horses are brought for them, on which they mount [and proceed] with drums and trumpets playing before them from the seashore to the sultan's residence, where they make their salutations to the vizier and amir jandar. Hospitality is supplied to all who are in the vessel for three nights, and when the three nights are up they eat in the sultan's residence. These people do this in order to gain the goodwill of the shipowners....112

And finally some years later in the Maldives:

It is a custom of theirs when a vessel arrives at their island that kanadir, that is to say small boats, go out to meet them, loaded with people from the island carrying betel and karanbah, that is green coconuts. Each man of them gives these to anyone whom he chooses on board the vessel, and that person becomes his guest and carries his goods to his host's house as though he were one of his relatives. Any of the visitors who wishes to marry may do so, but when it is time to leave he divorces the woman, because their women never leave the country. 113

Ibn Battuta's experiences were the norm. In Quilon in the twelfth century a European visitor, Benjamin of Tudela, said that when foreign merchants arrived three secretaries of the king came on board, wrote down their names, and reported them to the king. The king then gave them security for their property, which he claimed could even be left in open fields without guard. Marco Polo wrote generally, and perhaps over-flatteringly, that Indian merchants

are the best merchants in the world, and the most truthful, for they would not tell a lie for anything on earth. If a foreign merchant does not know the ways of the country he applies to them and entrusts his

goods to them, they will take charge of these, and sell them in the most loyal manner, seeking zealously the profit of the foreigner and asking no commission except what he pleases to bestow. 115

We also have an account demonstrating practice in the great Gujarati port of Cambay in the sixteenth century. While this is beyond the period of this chapter, Cambay was little affected by the policies of the Portuguese. The Frenchman Vincent Le Blanc was in Cambay in the mid 1570s. He wrote:

Trade is very faithfully carried on there [in Cambay] for the Factors and Retailers are persons of quality, and good reputation; and are as careful in venting and preserving other persons wares, as if they were their own proper goods; they are also obliged to furnish the Merchants with dwelling houses, and warehouses, diet, and oftentimes with divers sorts of commodities: the houses are large and pleasant, where you are provided with women of all ages for your use, you buy them at certain rates, and sell them again when you have made use of them, if you like them not you may choose the wholsomest and the most agreeable to your humour: all things necessary to livelihood may be made your own at cheap rates, and you live there with much liberty, without great inconveniences; if you discharge the customs rates upon merchandizes, nothing more is exacted, and all strangers live with the same freedom and liberty as the Natives do, making open profession of their own Religions. 116

It could be that the allocation of a local to act as agent led to some fleecing of the ignorant arriviste. Tomé Pires described how in Melaka, before the Portuguese conquest, when a ship came in the captain or leading merchant negotiated a price with a group of ten or twenty local merchants, and they then divided the goods up among themselves. This did mean that sales were quick, an important consideration given the monsoon system. 117 So also in Calicut, again at the end of our period. When the foreign Muslim traders, the pardesi, arrived, 'As soon as any of these Merchants reached the city, the King assigned him a *Nayre*, to protect and serve him, and a *Chatim* clerk to keep his accounts and look after his affairs, and a broker to arrange for him to obtain such goods as he had need of, for which three persons they paid good salaries every month.'118 This account is confirmed by Ma Huan, from Zheng He's fleet, and his account seems to show a very considerable degree of state control or facilitation: the two seem to merge in rather. He wrote that in Calicut pepper was held in a state storeroom, and sold at a fixed price, but one had to have an official's permission. When a ship arrived an official and the people on board negotiated fixed prices for the goods it carried, and also for what the people on ship wanted to buy from the locals.

These prices had to be observed, with no deviation. 'Foreign ships from every place come there; and the king of the country also sends a chief and a writer and others to watch the sales; thereupon they collect the duty and pay it in to the authorities.'119

Two earlier examples again point to a rather benevolent situation, where merchants were able to counter attempts to fleece them from land powers, and port controllers. A Jewish merchant who left Oman poor, but made a great fortune, came back thirty years later in 912 to Sohar with a huge cargo of Chinese merchandise. Envious people persuaded the Caliph in Baghdad to confiscate his goods, but the governor of Oman was worried about this as he knew that he would lose trade in his port if word of this got out. He summoned all the heads of the merchant communities, and told them what had happened. They closed down the markets, and sent a petition to the Caliph, and the governor was able to avoid having the Jewish merchant arrested. Buzurg recounts a very similar tale, one perhaps based on this actual event. He tells how a rich Jewish merchant in Oman was unjustly arrested by the rulers. This was seen as prejudicial to all merchants and foreigners, and once word of his arrest got around no ships would come to Oman. The markets all closed and foreign merchants got ready to leave. Upset, the locals pointed out that 'We shall be deprived of our living when ships no longer come here, because Oman is a town where men get everything from the sea.'120

In sum, there is very little evidence of the use of force in the Indian Ocean before 1498. The bottom line is competition. None of these port cities could afford to be too abusive, for then merchants would go elsewhere. The crucial point is that these Asian port cities prospered not by compulsion, but by providing facilities for trade freely undertaken by a vast array of merchants. What the rulers provided was really opportunities, fair treatment, an infrastructure within which trade could take place. They ensured low and relatively equitable customs duties, and a certain law and order, but did little else. Officials concerned with trade were instructed to encourage and welcome visitors. In short, visiting merchants wanted a level playing field. If they did not get this, they could retaliate by going elsewhere.

What was the basis of these merchant communities? The main distinction between various *natios* (a word deriving from the Mediterranean, which can be used to refer to Indian Ocean merchant communities) was not power or wealth, and certainly, in this pre-modern and pre-national age, it was not nationality: these people did not carry passports, and knew little or nothing of frontiers between sovereign states. The senior historian Philip Curtin some time ago wrote a book about 'trade diasporas', which he thought characterised much premodern trade. The notion is that various traders spread out from some place of origin, like say Jews, or Armenians. 121 However, his stress on their being dispersed, and on the importance of kin and connections, seems to be to a degree invalid; all merchants at this time operated through these sorts of connections, regardless of whether they were an Armenian trading in Tibet or a Gujarati Jain trading in Cambay. Indeed, the whole concept of a diaspora seems problematic, for many of the groups he classifies in this way did retain strong ties with some base or home area; this certainly applied to India's Hindu and Muslim overseas traders, and even to Armenians, who had no country but did have centres, notably New Julfa in Isfahan. 122

If these merchant communities were not all trade diasporas, on what criteria were they based? Obviously not all merchants were itinerant. Rather, various merchant groups had agents, often kin, located in the major trading centres. There were at least two reasons for this. First, someone based in an echelle for some time would learn the local languages and customs, and provide good information for his visiting kin folk. Some port controllers, as we saw, provided mediators for visitors, but in many cases merchants preferred to use their own locally based men. Second, the monsoon pattern necessitated a local permanent contact. A merchant who arrived and was dependent on leaving on the next monsoon would be at a massive disadvantage, as the locals would merely put up their prices and he would have no bargaining power as he would have to leave at a set time in order to catch the monsoon to get home. But someone there permanently could buy when the market was low, and sell when it was high, throughout the year.

Merchant networks could be very extensive indeed, stretching all around Eurasia. From the early fifteenth century the Venetians, who dominated the trade in spices in the Mediterranean, had networks of correspondents and associated merchants' firms going from Venice to Aleppo, Baghdad, Basra, Hurmuz, Diu and Tabriz, and probably to Mashad and Samarkand as well. The aim, successfully realised, was to get information on planned movements of goods. The Armenians had similar networks, spreading from Amsterdam to Moscow and from Istanbul to Cochin and Abyssinia. 123

Some of these were kin based networks, in which family ties and a common religion intersected. Armenians practised a particular form of Christianity. Jews had their own faith. Larger trading groups were internally divided: Hindus most obviously by caste, as were Jains. But the best information we have on these religious divisions relates, fortuitously, to the major dispersed trading communities in the Indian Ocean, that is Muslims. As we commented extensively earlier in this chapter, merchants and religious specialists worked hand-in-hand in our period, indeed could be the same person, in that a trader could well adhere to a particular Sufi (Muslim devotional) order, and a religious specialist would trade on his own behalf. In the fifteenth century we know of a group who came from a town in Iran called Kazarun, whose community solidarity was based on locality as well as common religious practice. These merchants were all adherents of a Muslim saint of this town, and his successors sold 'spiritual insurance', in that the merchants would get a blessing and in return, once back from a successful voyage, they would pay a sum of money. This particular network had people in Cambay, Calicut, Quilon, and Guangzhou in China.

Yet we must not let a communal flavour come in to our discussion. There is clear evidence that in Gujarat Hindus and Muslims interacted economically, with for example Muslim traders being happy to use Hindu brokers to secure their goods. Similarly, Jews traded with Armenians, and so on. Indeed it could be, reverting to our discussion of littoral society (see pages 37–41), that all those who travelled and traded by sea had a certain commonality which gave them some identity with those who also did this, as compared with those of their own religion who did not. A Muslim sea trader may have felt more at home with a Jewish sea trader than with a Muslim peasant, or for that matter a mullah, located far inland. The physical aspect of the sea, and the port – the ship, the prostitutes and taverns, the role

of the monsoon, haggling over customs – made up an experience which differentiated sea travellers from all others. 124

These merchant groupings acted relatively autonomously within the port polities. In Melaka at the time of the Portuguese conquest in 1511 four merchant communities were important, each of them living autonomous lives with their own headmen, called shahbandars, and governing themselves with little or no reference to the ruler, the sultan. The most important of these four groups were the Gujaratis. Many were resident, but some 1,000 merchants from Gujarat visited each year. The other main groups were other merchants from the west, that is from India and especially Klings from Coromandel, Malays from Indonesia and as far east as the Spice Islands and the Philippines, and the East Asians, mostly from South China but also from Japan and Okinawa. They lived in ethnically based quarters, here called kampongs, and each group was represented before the 'state' by a shahbandar. The sultan participated vigorously in trade, but apparently gave himself no particular advantage from his position as ruler. 125 Similarly, in the great Gujarati ports different merchant communities had recognised leaders, though their power here, being located not in an independent port city but in a city which was part of a major landed state, must have been less. In Calicut there was a clear distinction, and considerable autonomy, for Gujarati Hindu merchants, foreign Muslims from various places of origin (the most important being those from the Red Sea and Cairo, known as *pardesi*), and local Muslims, known as Mapillahs. 'They sail everywhere with goods of many kinds and have in the town itself a Moorish Governor of their own who rules and punishes them without interference from the King, save that the Governor gives an account of certain matters to the King.'126

Most political elites used intermediaries to handle their trade, rather than engage themselves in haggling and bargaining. In Gujarat Muslim governors and rulers often used Hindu and Jain intermediaries to handle their private trade. In southeast Asia port city rulers traded vigorously, and indeed sometimes may have taken advantage of their power position. Increasingly, however, they used a quasi official called the saudagar raja, typically a south Indian Muslim or chulia who was the local ruler's official business agent. These people acted as brokers or mediators between the

economy and the court.<u>127</u> The point to note here is that it is one thing for a ruler or a noble to trade, whether directly or through an intermediary, but it is quite another matter to pursue mercantalist policies by which the state as a state aims to control and direct trade.<u>128</u>

It is true however that this varied from port to port. The situation in the Malay world appears to be rather different. Here there were no vast territorial empires, but rather a host of smaller polities. All of these were more or less dependent on maritime trade. This area was much more maritime, more imbricated in the ocean, than were the other areas we have discussed. It is revealing to note that, unlike most other parts of the ocean, especially China and India, all great southeast Asian cities were either ports or were on navigable rivers. For the latter, we can instance Pegu, Ava, Phonpenh, Ayutthaya, and for the former Pasai, Melaka, Aceh, Palembang, Patani, Brunei, Manila, Makassar, Banten, Demak, Grisek/Surabaya.

This seems to have meant that the rulers of these port polities played a much larger role in sea trade than was the case elsewhere, for trade was more central both for them and for the usually rather limited inland areas behind them. In this insular world the inland was closely connected to the coast, and trade patterns in the ocean affected even basically inland states like Burma and Thailand, let alone the smaller coastal states in Indonesia such as Aceh, Perak, Kedah, and Johore. 129

What examples do we have of state intervention? They are actually few and far between in southeast Asia. An extreme example was Srivijaya, a Sumatran thalassocracy, which controlled the Straits of Melaka from the seventh to the thirteenth centuries. More generally, Arun Das Gupta gives a picture of heavy state involvement: ports were dominated by sultans, coastal trade was under their control, and so was spice production, which was done by slaves. 130 It may be that coercion increased once the Portuguese, with their attempts at monopoly, arrived. The ruler of Aceh began to control pepper production, and even wiped out cultivation in some areas in order to deny pepper to the Europeans. 131 The best summing up for the southeast Asian case may be that there certainly was more intervention in trade from states than was the case in the rest of the Indian Ocean, and this was fundamentally a consequence of the geography of the area. Yet this

is a relative matter. Obviously no Indian Ocean state or port polity got near the sort of economic control which any modern state routinely exercises.

I will end this long account of ports, products and merchants with a handful of more personal and individual accounts of actual travellers. Many of these men are petty traders or, in F.C. Lane's felicitous phrase, the sea proletariat. They travelled mostly short distances — up and down the coasts, or on the inland waterways, the backwaters of the Kerala near interior or in the marsh area of the Tigris-Euphrates delta. They visited many strange places well outside the interest of the established great merchants. The fictitious but still arguably prototypical Sindbad the Sailor visited one place, probably the remote Andaman Islands, and found that the inhabitants rode their horses bareback. He got a saddle made, and they were all delighted and gave him many presents. 132

Yet again we must not categorise too strictly. Pedlars sometimes could be so lucky as to acquire a valuable item, and there is no reason to assume merchant princes found it beneath their dignity to trade in necessities. Sindbad seems to be a typical Indian Ocean trader. He purportedly lived in Baghdad during the golden reign of Harun al Rashid, when the city was at its most splendid. On his first voyage, 'From Basrah we sailed, day after day, night after night, over the sea, visiting island after island and land after land, selling and bartering our goods at each.' So also on the second, when they went 'visiting from island to island and ocean to ocean for many weeks, making ourselves known to the notables and chief merchants at each port of call, and both selling and exchanging our goods to great advantage.' And again on his fifth voyage, when after his celebrated escape from the Old Man of the Sea he traded in coconuts, and with them bought pepper and cinnamon, and made so much from them that he was able to hire divers once he got to the sea of pearls. He made 'an immense fortune'. Then he bought aloe wood, and went back home to Basra.133

Ghosh's brilliant study of an 'antique land' describes other people who travelled huge distances. In Aden in the 1120s there were at least two Jewish merchants who 'bear witness to a pattern of movement so fluent and far-ranging that they make the journeys of later medieval travellers, such as Marco Polo and Ibn Battuta, seem unremarkable in comparison.' One was

the prominent Jew Abu Sa'id Halfon of Fustat, that is Cairo, who now lived in Aden. He travelled between Egypt, India, East Africa, Syria, Morocco and Spain. The other was Abu Zikri Sijilmasi, from Morocco, who travelled to Egypt, Aden, southern Europe, and India. 134

So also a merchant in Qais, or Qeys, in the thirteenth century. He had 150 camel loads of wares and 40 slaves and servants. He said that he wished 'to carry Persian saffron to China where I understand that it has a high price, and then take the dishes from China to Greece, Greek brocade to India, Indian steel to Aleppo, glass of Aleppo to Yemen, and the striped material of Yemen to Persia.'135 We also know of a merchant around 1300 who was born in Aleppo, then moved to Baghdad, Hurmuz and India, then China, and entered and left China five times. He finished up in India, then returned to Aden, where he was fleeced by the ruler, and so went to Egypt.136

Goitein's heroic work on the Geniza documents provides more detailed and evocative data about Jewish merchants. One merchant travelled widely, both on his own account, and as an agent for others. This particular merchant hailed from Tripoli, but lived in Cairo. At the end of the eleventh century he planned a trip via the Red Sea to India, with his own goods and on account those of others. First he left Cairo and went to Tunisia to get coral to take to India. Then he came back to Cairo, went down the Red Sea, and finally reached Anhilvarah, north of modern Bombay, where he spent over a year doing business for himself, and his Tunisian, Egyptian, and Aden customers. Alas, he was shipwrecked on way back, so this was a very unsuccessful trip.137

In a major reconstruction, Goitein writes of Allan, the nephew of a major Jewish trader of the early twelfth century who had migrated from Al Mahdiyya, now in Tunisia, to Cairo. Allan, the nephew, went to Aden, but the markets were flat, so he sold some goods and decided to take others on to India. He finally got to a city in Malabar, 'but riots and bloodshed occurred, and whoever was in the town fled.' He and his companions loaded their cargo of iron and textiles during the night and fled to Fakaner, also in Malabar, and from there to Quilon, or Kulam, in the extreme south. From there they set off for Aden, but the captain was already ill. After ten days they ran into difficulties off the northern Laccadives. Then 'the captain had

a stroke and died. We threw his body overboard into the sea. So the boat remained without a commander... and we had no charts.' The terrified passengers insisted on returning to Kulam. There they were well treated and set off again for Aden. They got there early in the season, so he sold his iron and spices very well. However, he wanted to take pepper back to Cairo, and it was very dear in Aden, so he decided to go back to India to buy it. In this ship he took to India he chartered space to hold 150 bahars for the return voyage back to Aden. 138

We have discussed extensively the extent to which the rulers of the port cities intervened to advantage themselves or their trade. We have already noticed some rulers or agents of larger political structures intervening from time to time, and we can conclude with a more general discussion of wider political factors which affected trade by sea. We will look particularly at the matter of the effects of the rise and decline of landed empires on sea trade. In this the influence of a recent trend in European history will be evident. This aims to bring the state back in to explain at least in part economic exchange and development: it is not just a matter of the unseen hand of the market. 139

Historians have been particularly interested in the fact that on two occasions during our period great empires provided security and a market for luxuries in different parts of the Indian Ocean world. The huge trade between China and the Abbasid empire has been linked to the rise and florescence of the Abbasid state after 750, and a similar situation with the T'ang dynasty in China from 618–907. The Fatimids in Egypt, the Colas in South India, and the Song in China produced the same effect in the eleventh and twelfth centuries.

There certainly seems to be some connection between flourishing trade and stable empires, albeit one hard to quantify. Such empires usually got most of their revenue from the land, not the sea, and prevailing norms were usually hostile, or at least indifferent, to sea trade and merchants, as we pointed out at the beginning of this chapter (see pages 62–3). Yet merchants did provide customs revenues, and perhaps more important brought curiosities and preciosities to the court. More generally, a strong, stable empire obviously has advantages for economic activity in general,

including sea trade. Some states were actually quite interventionist. Srivijaya controlled the straits of Melaka for some time. In the early eleventh century the Cola state in south India responded to this with devastating raids. Thirteen ports in the Malay peninsula, Sumatra and the Nicobar Islands were attacked by Rajendra Cola.

The decline of empires usually produces much confusion, and this may be detrimental to trade, though on the other hand as an empire declines it will release hoarded wealth with which to defend itself, thereby increasing liquidity. Some notable episodes in the decline of these empires no doubt did impact on trade. In its last few decades the T'ang dynasty was less stable, and Guangzhou was sacked and foreign merchants massacred in 878 by a rebel army. At this same time, in 868–83, the Zanj slaves in lower Mesopotamia rebelled, and this is considered to have contributed to Abbasid decline. Later, the *coup de grâce* for the Abbasids, that is the sacking of Baghdad by the Mongols in 1258, may have disrupted trade, though this claim is open to doubt. The other great example of politics intervening in the ocean in our period is the cessation of Zheng He's voyages in the 1430s as a result of a change in Ming policy. The precise reasons for this shift have been much debated, but certainly these expeditions were terminated by the court, and foreign trade greatly restricted. However, this coincides with the rise of Melaka, and it is a 'chicken-and-egg' matter as to whether the rise of Melaka meant the great expeditions were no longer needed, as compared with the rise of Melaka being to fill the gap left by the end of the voyages. In any case, the whole matter of this connection is difficult indeed to prove. Perhaps the point to keep in mind is that there were much more constant and important matters which affected merchants engaged in sea trade, namely did their imports meet local demand, and were prices high?

In the early 1340s Ibn Battuta was happily sailing along the west coast of India when his ship was attacked by pirates:

the infidels came out against us in twelve warships, fought fiercely against us and overcame us. They took everything I had preserved for emergencies; they took the pearls and rubies that the king of Ceylon had given me, they took my clothes and the supplies given me by pious people and saints. They left me no covering except my trousers. They took everything everybody had and set us down

on the shore. I returned to Qaliqut and went into one of the mosques. One of the jurists sent me a robe, the gadi a turban and one of the merchants another robe. 140

Apart from again reminding us of how he could gear in to Islamic networks at need, this passage introduces the matter of piracy in the Indian Ocean in our period. Interestingly, Marco Polo had more or less the same problem, and we may note that Polo only slightly predated Ibn Battuta, for he died in 1324, a year before the latter set out from Morocco on his first hajj.

Polo wrote that on the west coast of India

there go forth every year more than a hundred corsair vessels on cruise. These pirates take with them their wives and children, and stay out the whole summer. Their method is to join in fleets of 20 or 30 of these pirate vessels together, and then they form what they call a sea cordon, that is, they drop off till there is an interval of 5 or 6 miles between ship and ship, so that they cover something like an hundred miles of sea, and no merchant vessel can escape them. For when any one corsair sights a vessel a signal is made by fire or smoke, and then the whole of them make for this, and seize the merchants and plunder them.... But now the merchants are aware of this, and go so well manned and armed, and with such great ships, that they don't fear the corsairs. Still mishaps do befall them at times.

With the King's connivance many corsairs launch from this part to plunder merchants. These corsairs have a covenant with the King that he shall get all the horses they capture, and all other plunder shall remain with them. The King does this because he has no horses of his own, whilst many are shipped from abroad towards India; for no ship ever goes thither without horses in addition to other cargo. The practice is naughty and unworthy of a king.141

What these two unfortunate travellers are describing is either piracy or corsair activity. Whichever it may be, it is crucial to distinguish this from actual naval activity from port cities or other political entities, for at this time there were virtually no navies in the Indian Ocean, the exceptions being perhaps Zheng He's voyages, and the activities in Sri Lanka, the islands, and the Malay world of the Colas. The real danger was from pirates and corsairs, the former to be seen as acting autonomously of any political entity, the latter connected, at least loosely, as Polo wrote, with a local ruler. Pirates were the most prevalent. Yet we need to keep in mind that some piracy is in the eye of the beholder; the so-called pirates could see themselves very differently, as we will discuss in detail in the next chapter.

Ibn Battuta had more than one skirmish with these predators, who were quite prepared to attack even very large ships. He set off from the Gulf of Cambay on an official mission from Muhammad bin Tughluq to the emperor of China. The mission had several ships, and one of them must have been a good size, as it carried seventy horses. Battuta's own ship had fifty rowers and fifty Abyssinian men at arms: 'These latter are the guarantors of safety on this sea; let there be but one of them on a ship and it will be avoided by the Indian pirates and idolators.'142 Chinese accounts of the straits of Melaka, then and now a haven for pirates, complained that the locals 'are very daring pirates. If they meet upon a foreign ship, they get into small boats, a hundred in number, and approach the enemy for several days. With a fair wind he may be lucky and escape. Otherwise he will be intercepted by them, and his goods will be plundered. Travellers who float around on the sea should guard against these robbers.'143

Some pirates seem to have set up almost state-like structures. Ibn Majid south of Calicut found that the pirates there, operating out of the Kerala backwaters, were 'ruled by their own rulers and number about 1000 men and are a people of both land and sea with small boats'.144 So also in the Gulf near Hurmuz in the twelfth century. The island of Kish was more or less a pirate state, or so the hostile accounts available say. These men raided up and down the Indian west coast, and across to East Africa. In 1135 they became very daring. They wrote to the ruler of Aden demanding a part of the city as protection against being raided. This was refused, so the pirate Amir sent fifteen ships, which entered Aden harbour and waited. They had no intention of landing: rather they wanted to capture merchant ships on their way back to India. Finally, two ships belonging to Abul Qasim Ramisht of Siraf, in the Gulf, appeared, but helped by troops from Aden they were able to beat off the pirates.145

Natural events were much more perilous for sea travellers than were pirates. People used various rites and ceremonies to try to avoid the perils of the sea. The sea was generally seen as more hostile, chancy, and uncontrollable than was land. There were the dangers of the deep, uncertain winds and tides, fickle fish, and frail craft on the ocean. Various rites and ceremonies were used to counter these dangers.

It would be easy to disparage these as blind superstition, yet Palmer has put forward an argument to show their utility. Magic, religion, ritual used in perilous times at sea have two positive results. They relieve anxiety amongst those in danger, and more generally they promote cooperation and solidarity amongst those on board, and this in turn can increase the chance of saving a ship which is in danger. 146 It is in this context that we need to evaluate the following examples of rites and ceremonies from our period.

Let us start, as usual, with Ibn Battuta. In 1347 he was sailing south from China and they were lost at sea.

At first light on the forty-third day a mountain became visible in the sea about twenty miles away. The wind was carrying us directly towards it. The sailors were amazed and said 'We are not near land and there is no knowledge of a mountain in the sea. If the wind drives us on to it we shall perish.' Everyone resorted to self-abasement, to devotion, and to renewed repentance, supplicating God in prayer. We sought Him through his Prophet, on whom be the Blessing and Peace of God. The merchants swore to give plentiful alms, which I recorded in my own writing. [He wanted to be able to remind them of their vows once the danger had passed!] The wind became somewhat calmer and at sunrise we saw that the mountain had risen into the air and there was light between it and the sea. We were amazed at this, and I saw the sailors weeping and saying good-bye to each other. I said: 'What is the matter?' They said: 'What we took for a mountain is the rukhkh. If it sees us we shall perish.' We were then less than ten miles from it. Then God Most High gave us the blessing of a favourable wind, which took us directly away from it. We did not see it or know its true shape. 147

What Battuta and his shipmates did was call on more or less normative Islamic ideas to avoid danger at sea. We have several other examples of this. A Chinese account of around 1200 wrote that in Malabar 'there is holy water which can still the wind and waves. The foreign traders fill opaque glass bottles with it, and when they suddenly get in a rough sea they still it by sprinkling this water on it.'148 The water was the celebrated Zamzam water, from a well in Mecca and believed to have a wide range of magical properties. Muslims also had a variety of prayers specific to perils at sea. One of the best known was the Hizb al-bahr, the Litany of the Sea, which dates from 656 AH.149 There was also a specific saint, Khwaja Khizr, associated with fertility, and so water, fish and the sea. He is to be found in many Sufi legends, and was frequently the object of prayers in order that he would guide mariners through dangerous waters.150 Some Muslims took a

more resigned approach to danger at sea, as Ibn Battuta found near Oman in 1329. A violent storm blew up.

There was accompanying us in the vessel a pilgrim [who] knew the Qur'an by heart and could write excellently. When he saw the storminess of the sea, he wrapped his head in a mantle that he had and pretended to sleep. When God gave us relief from what had befallen us, I said to him 'O Mawlana Khidr, what kind of thing did you see?' He replied 'When the storm came I kept my eyes open, watching to see whether the angels who receive men's souls had come. As I could not see them, I said 'Praise be to God. If any of us were to be drowned, they would come to take the souls.' Then I would close my eyes and after a while open them again, to watch in the same manner, until God relieved us.151

In 1444 Abd-er-Razzak was troubled at the prospect of travelling by sea from Honavar (Onor) to Hurmuz, but then he came across a Quranic passage which read, 'Fear nothing, for thou hast been preserved from the hand of unjust men.' He took this as a good omen, though nevertheless he had a terrible 65 day passage from Honavar to Hurmuz. His ship ran into a violent storm once it reached the open ocean, and he called on divine intercession to save him and his fellows. His account, even in translation, is full of Islamic images and metaphors. It is a stunning depiction by a landlubber of a storm at sea, rivalling, in my opinion, the best accounts in European literature, including those by Conrad.

On a sudden there arose a violent wind on the surface of the sea, and on all sides were heard groaning and cries. The night, the vessel, the wind, and the gulf, presented to our minds all the forebodings of a catastrophe. On a sudden, through the effect of the contrary winds, which resembled men in their drink, the wine which produced this change penetrated even to the vessel. The planks of which it was composed, and which by their conformation seemed to form a continuous line, were on the point of becoming divided like the separate letters of the alphabet. . . . The sailor, who, with regard to his skill in swimming, might be compared to a fish, was anxious to throw himself into the water like an anchor. The captain, although familiarised with the navigation of all the seas, shed bitter tears, and had forgotten all his science. The sails were torn, the mast was entirely bent by the shock of the wind. The different grades of passengers who inhabited this floating house threw out upon the waves riches of great value, and, after the manner of the Sufis, voluntarily stripped themselves of their worldly goods. Who could give a thought to the jeopardy in which their money and their stuffs were placed, when life itself, which is so dear to man, was in danger? For myself, in this situation, which brought before my eyes all the threatening terrors which the ocean had in its power to present, with tears in

my eyes I gave myself up for lost. Through the effect of the stupor, and of the profound sadness to which I became prey, I remained, like the sea, with my lips dry and my eyes moist, and resigned myself entirely to the Divine Will. At one time, through the driving of the waves, which resembled mountains, the vessel was lifted up to the skies; at another, under the impulse of the violent winds, it descended like divers to the bottom of the waters.

He prayed hard, and reflected on his fate.

I was in the middle of these reflections, and everything about me spoke of dejection and trouble, when at length, by virtue of that Divine promise: 'Who is He who hears the prayers of the afflicted, and drives away his misery?' [Quran, s. 27, verse 63] on a sudden, the zephyr of God's infinite mercy began to blow upon me.... The morning of joy began to dawn from the East of happiness.... The impetuous hurricane was changed to a favourable wind, the tossing of the waves ceased, and the seas, in conformity with my desires, became completely calm.152

We get only glimpses of what it was really like travelling by sea at this time. Many of the accounts we do have, such as some of those just quoted in the discussion of 'superstition', are about the dangers of life at sea, for as one would expect these impacted decisively on landlubbers. Given the large role of Muslims in trade at this time, many accounts are from Muslim men travelling to trade, or for fun. There is a large and fabulous Islamic travel literature. The Book of the Thousand Nights and One Night, from the time when the Abbasid empire was at its height, is best known, but there is also Buzurg's collection from the tenth century, with copious tall stories featuring giant whales, mermaids, islands with only women, a snake that ate an elephant, as so on. Sindbad is equally fabulous and exciting, but he does at least provide an evocative explanation for why people wanted to travel. He was constantly prompted to leave a secure and mundane life ashore and head off for adventure and profit. 'I was living a life of unexampled pleasure [in Baghdad] when, one day, the old desire entered my head to visit far countries and strange people, to voyage among the isles and curiously regard things hitherto unknown to me; also, the trading habit rose in me again.' This happens to explain the start of each voyage. For example, concerning the beginning of his sixth voyage:

I was sitting one day taking the air before my door and feeling as happy as I had ever felt, when I saw a group of merchants passing in the street, who had every appearance of returned travellers. This sight recalled to me how joyful a thing it is to return from journeying, to see the birth land after far voyage, and the thought made me want to travel again. I equipped myself with merchandise of price, suitable for the sea, and left the city of Baghdad for Basrah. There I found a great ship filled with merchants and notables as well provided with goods for trading as myself, so I had my bales carried on board, and soon we peacefully set sail from Basrah. 153

Many Muslims travelled by sea to fulfil their pious obligation to perform the hajj. Ibn Jubayr was merely going across the Red Sea, from 'Aydhab to Jiddah, yet he had a horror voyage, one which, given the notorious difficulty of navigation in these treacherous waters, was probably not that unusual. It took eight days to cover a distance, as the crow flies, of about 300 km.

There had been the sudden crises of the sea, the perversity of the wind, the many reefs encountered, and the emergencies that arose from the imperfections of the sailing gear which time and again became entangled and broke when sails were raised or lowered or an anchor raised. At times the bottom of the jilabah would run against a reef when passing through them, and we would listen to a rumbling that called us to abandon hope. Many times we died and lived again....154

We quoted above Abd-er-Razzak's account of a storm in 1444, and how his prayers saved the ship. This occurred on his return voyage back to Hurmuz, but when he had set out from there in 1442 it was his first sea voyage, and he was already a bit apprehensive: 'The events, the perils, which accompany a voyage by sea (and which in themselves constitute a shoreless and a boundless ocean), present the most marked indication of the Divine omnipotence, the grandest evidence of the wisdom which is sublime.' His ship finally left from Hurmuz in May 1442, at the end of the monsoon, 'when tempests and attacks from pirates are to be dreaded.' It was a terrible voyage. 'As soon as I caught the smell of the vessel, and all the terrors of the sea presented themselves before me, I fell into so deep a swoon, that for three days respiration alone indicated that life remained within me.' He need not have worried too much, as they had missed the season and they all got off at Muscat. Then he got sick, and finally had a good eighteen-day voyage to Calicut around September 1442. He recovered during the voyage:

In short, the air of the sea having become more salubrious, gave me the hope of a perfect cure; the morning of health began to dawn upon the longing of my hopes; the wounds caused by the sharp arrows of my malady began to heal, and the water of life, hitherto so troubled, recovered its purity

and transparency. Before long a favourable breeze began to blow, and the vessel floated over the surface of the water with the rapidity of the wind. 155

We can end this long chapter by returning one last time to our hero, Ibn Battuta. As a landlubber he left invaluable accounts of what it was like at this time. We have commented frequently on how his status as a prestigious scholar eased his passage, for everywhere he was accepted and patronised and helped by fellow Muslims. His *Rehla* also gives us evocative accounts of many different sorts of travel by water, and many different perils and pleasures, just as Abd-er-Razzack found too.

His maritime career began inauspiciously. In 1329 in Jiddah he embarked on a jalba (a small sewn craft) which belonged to a person from Abyssinia. A sharif wanted him to travel with him on another jalba, 'but I did not do so on account of there being a number of camels with him in his jalba, and I was frightened of this, never having travelled by sea before.' Later that year he tells us what he had to eat. He was near Oman on a small ship:

My food during those days on that ship was dried dates and fish. Every morning and evening [the sailors] used to catch fish. . . . They used to cut them in pieces, broil them, and give every person on the ship a portion, showing no preference to anyone over another, not even to the master of the vessel nor to any other, and they would eat them with dried dates. I had with me some bread and biscuit... and when these were exhausted I had to live on those fish with the rest of them.156

Later he had good times and bad times at sea. Once he had a most luxurious trip with the governor of Lahari in Sind on the river of Sind. There were fifteen small ships to carry baggage and various retainers. Some were musicians and singers.

First the drums and trumpets would be sounded and then the musicians would sing, and they kept this up alternately from early morning to the hour of the midday meal. When this moment arrived the ships came together and closed up with one another and gangways were placed from one to the other. The musicians then came on board the governor's ahawra and sang until he finished eating, when they had their meal and at the end of it returned to their vessel. 157

Another voyage a few years later was a very different matter. In the mid 1340s he was shipwrecked off the Coromandel coast:

During the voyage a gale sprang up and our ship nearly took in water. We had no knowledgeable pilot on board. We came to some rocks on which the ship narrowly escaped being wrecked, and then into some shallows where the ship ran aground. We were face to face with death, and people jettisoned all that they had, and bade farewell to one another. We cut down the mast and threw it overboard, and the sailors made a wooden raft. We were then about two farsakhs from the shore. I was going to climb down to the raft, when my companions (for I had two slave-girls and two of my companions with me) said to me: 'Are you going to go down and leave us?' So I put their safety before my own and said: 'You two go down and take with you the girl that I love.' The [other] girl said: 'I am a good swimmer and I shall hold on to one of the raft ropes and swim with them.' So both my companions... and the one girl went on the raft, the other girl swimming. The sailors tied ropes to the raft, and swam with their aid. I sent along with them all the things that I valued and the gems and ambergris, and they reached the shore in safety because the wind was in their favour. I myself stayed on the ship. The captain made his way ashore on the rudder. The sailors set to work to make four rafts, but night fell before they were completed, and the ship took in water. I climbed on the poop and stayed there until morning, when a party of infidels came out to us in a boat we went ashore with them to the coast of Ma'bar.158

Ibn Battuta here showed a concern for his slave girls, and he wrote once of them that 'it is my habit never to travel without them.'159 He is not however referring to the same two girls all the time, for he was, as Dunn puts it in his excellent reconstruction of his travels, 'a man with a long history of abandoning we may only guess how many sons and daughters in various parts of the Muslim world.'160 He had a son to a Moroccan woman/wife in Damascus, who died age 10, a daughter to a slave girl in Bukhara, who died, a daughter in Delhi to a wife, another to a slave girl in Malabar, a son in the Maldives to a wife. Indeed, he 'married several women' in the Maldives. He pointed out that 'Any of the visitors who wishes to marry may do so, but when it is time to leave he divorces the woman, because their women never leave the country.'161 Given that he usually travelled with at least one slave girl, we can only assume his progeny were scattered all over the shores of the Indian Ocean and beyond.

In this matter he was not unusual, and we may assume that not only Muslim travellers had 'wives in every port'. Vincent Le Blanc was impressed with the system he found in Cambay (see page 98). Yet it has been found in the Muslim case much more than in other societies at this time. Some members of the crew that Alan Villiers sailed with had several wives in different

places. One nakhoda from Sur had a son in Pemba, another in the Comoros, and a daughter from a secondary wife from the African interior. 162 The Muslim custom of allowing several 'legal' wives, and then the practice, in theory only Shiah but in fact done more widely, of muta, or temporary marriage, which really became part of customary law among travelling Muslims, made it much easier for Muslims to follow this maritime tradition. Ibn Battuta may have been more scrupulous in this matter, for in the Maldives at least he divorced his wives before he left.

Chapter 5

Europeans in an Indian Ocean world

This chapter provides a long analysis of the arrival, and impact, of Europeans in the Indian Ocean up to the mid eighteenth century. The aim is to locate these Europeans in the structures we have already described in the previous chapter. In a possibly perverse way, what we intend to show is that the European presence over its first 250 years certainly varied from place to place and time to time, but overall the effects on the Indian Ocean, its trade, its people, even its politics, was limited. The next chapter deals in detail with continuing structures, which by and large the Europeans were forced to accommodate, or concerning which they had no knowledge at all. Here we will look not only at trade, the topic which so far has dominated the historiography of the Indian Ocean, but also at religious movements, and the social history of people on ships. Finally we will note how the Indian Ocean was now much more part of a wider world than had been the case in previous centuries. In the terms set out by Horden and Purcell, we increasingly have to write a history where the history in the ocean, that is a history which looks beyond its geographical bounds, is more important than an autonomous history of the ocean. Yet so far these links to the rest of the world were relatively benign: in the last two chapters of this book we will see how their nature changed as Europe changed, and the Indian Ocean became peripheral in the capitalist world economy.

Few writers today would follow the Indian scholar-diplomat K.M. Panikkar and write about a Vasco da Gama period of Asian history, beginning in 1498 when the Portuguese navigator arrived in southwest India. Some however would accept his succeeding claim, that it 'was a great event from the point of view of the results that followed from it.'1 The tendency here, much to be found also in Victorian English accounts of their empire, is that this was the crucial insertion of the wedge which later led to European dominance. My whole argument is that the presence of Europeans is one thing, and certainly there were increasing numbers of them in the Indian Ocean region in the period covered by this chapter, but to see this as the

beginning of the demonstrable dominance of the nineteenth century is to take a very teleological view indeed. There had, after all, been 'foreigners' in the Indian Ocean for millennia: Romans, Greeks, a host of others. Early Europeans fitted into a very broad and diverse complex of people living around and sailing across the ocean. There was contact certainly, both hostile and peaceful, but until the power dimension changed in the later eighteenth century this did not become an impact, let alone dominance.

One useful way to get a perspective is to remember Zheng He's expeditions, which we described in the previous chapter (see pages 90–1). He commanded massive fleets. The first one in 1405 included sixty-two large ships, some of them over 100 metres long. There were about 28,000 men in this expedition. The best perspective is to remember that in the early fifteenth century, as the Portuguese began their slow progress down the West African coast (they took Ceuta, in Morocco, in 1415), Chinese fleets came close to the Cape of Good Hope; some think they sailed around it. At the end of this century Europeans rounded the Cape, and soon after reached the Straits of Melaka, at the other end of the ocean. Thus at the beginning of this century these straits saw a great Chinese fleet, and at the beginning of the next a much smaller European one. At these two times the port city of Melaka became first a sender of tribute to the Chinese emperor, and then at the end was conquered by the Portuguese.

Another even wider comparison is also instructive. Andrew Hess points out that between the Portuguese capture of Ceuta and 1522, when Magellan set off around the world, the Europeans began maritime expansion, or even empires. The Ottoman Turks did this at the same time, and the two collided in the northern Indian Ocean in the sixteenth century. By the accession of Suleyman in 1520 the Ottomans ruled a coastline stretching from the Crimea to Yemen, and also including the Black Sea and much of the Mediterranean. Yet the Portuguese and Ottoman empires were very different. As we will see, the Portuguese version was essentially maritime, but for the Ottomans taxing and controlling land was always the key, with maritime matters merely an adjunct. In 1526 Suleyman lost interest in the Indian Ocean and instead turned to Hungary.2

Broadly speaking, the evolution of the European presence goes like this. From 1500 to well into the eighteenth century Europeans controlled some ports: some they created, some they conquered. In this period these ports had a totally maritime focus; the Europeans controlled little except some mostly long-distance oceanic trade. Only the umland was usually also taken, this being where food came from. Indigenous ports were different, for they had connections with the inland as well as the umland, even if they were not part of an inland state. The at least tacit support and patronage of land-based powers was essential for them to survive. In the eighteenth century some European ports began to be more closely linked to their hinterlands, and soon after, Europeans conquered these hinterlands, fundamentally altering the situation. The focus of the ports moved from one concentrating on the foreland to one looking more to the hinterland.

I will argue later that the Portuguese introduced politics into the Indian Ocean. To set them in context, I will first provide a discussion of the attitudes of Asian rulers to sea trade and maritime matters more generally. In all this the crucial distinction is between Asian rulers of port cities, and those controlling vast landed empires in the interior.

As we noted in the previous chapter, the rulers of the autonomous port cities — such as Mombasa, Kilwa, Mogadishu, Aden, Hurmuz, Calicut and Melaka — were completely dependent on trade for their revenue: controlling only small areas of land, the usual Asian resource of a tax on land and its products was not available to them. Some of these rulers traded for themselves, especially those in southeast Asia, though we have claimed that this was done as a merchant rather than as a ruler. To advantage oneself as a merchant by using political power (such as monopolies or forced purchase) would be to drive away the visiting merchants on whom the ruler depended almost completely.

The link between politics and trade in the various port polities of southeast Asia was much closer to that of other port cities controllers in the western ocean than to the situation in the landed states, whether they be the three great Islamic empires or China. Kathirithamby-Wells has shown that in the Malay world the entrepot and the polity was always concentric. Controllers of port polities obtained prestige and luxury goods from their trade, and this

flowed into economic and political power. The geography of the area dictated that agrarian matters were much less dominant and, unlike, say, India and China, were not set off from maritime matters: rather they were complementary. Some southeast Asian rulers at times tried to use their political control to give themselves economic advantage, such as by proclaiming a monopoly over some products. Most however acted in the way we have sketched above, in other words tried to provide fair treatment for merchants so that they would continue to call.

These rulers of port cities clearly would oppose any outside force which threatened this situation of peaceful trade. When Europeans arrived and tried to monopolise trade in some products, and tax or direct other trade, these port cities or polities had to resist: some were successful, others not.

The situation in the great landed states in this period was quite different. Historians have found these states exhibiting three attitudes to trade, to merchants, and to the sea. Some say the state took no interest, some say it took an exploitative and malevolent interest, and some see a fruitful conjunction between political power and economic interests. We can ignore East Africa in this discussion, for the only major state, the Mutapa, was far inland, and in decline anyway. We are then really dealing with the three great Muslim states of the period, the Ottomans, the Safavids and the Mughals, and of them the Mughals deserve most of our attention. They ruled India, the area which has to be seen as the fulcrum or axis of the Indian Ocean. The Ottomans were far away and had landed, European and Middle Eastern, interests to pursue. The endemic wars between them and the Safavids show the landed focus of them both, and also means that they had little in the way of a maritime role in the Indian Ocean.

Nor, however, did seaborne Indian states. I will concentrate on the area of Gujarat, including the period after its conquest by the Mughals in 1572. The focus of the Muslim rulers of Gujarat is pithily encapsulated in a saying attributed to one of them: 'Wars by sea are merchants' affairs, and of no concern to the prestige of kings.' Their interest lay in controlling and taxing land, and the peasants on it. Customs revenues made up only a small part of their total revenue. Any activity which they may have undertaken at sea was very much auxiliary to land matters.

The attitude of the Mughals seems to be very similar, at least as regards specifically maritime matters. It was Akbar who conquered Gujarat, and at this time he had his first and only view of the sea. He went out from Cambay on a brief excursion with a select party, and enjoyed seeing the spectacle of the ocean. His interest in sea matters was very slight.

His main concern with the sea was a result of his desire to send pilgrims to Mecca, leaving from Surat and travelling by sea. Yet this concern did not lead to his taking the trouble to found a navy: as was noted of a successor, Aurangzeb, in the second half of the seventeenth century, he contented himself 'in the enjoyment of the Continent, and styles the Christians Lions of the Sea, saying that God has allotted that Unstable Element for their Rule.'3 The whole mind-set of the Mughal emperors and their nobles was land-based. Prestige was a matter of controlling vast areas on which were located fat, meek peasants. Glory was to be won by campaigns on land, leading one's contingent of cavalry, galloping over the plains. To courtiers, including the emperors, the sea was a marvel, a curiosity, a freak. This was not an arena where power and glory were to be won.

In 1617 Akbar's successor, Jahangir, also came to Cambay. His account of what he saw is of a piece with his numerous other observations in his memoirs where he is describing curiosities, such as a rare fruit, or a brave man. 'In these days during which I was encamped on the shore of the salt sea, merchants, traders, indigent people, and other inhabitants of the port of Cambay having been summoned before me, I gave each according to his condition a dress of honour or a horse or travelling money or assistance in living.' He found out that 'Before the arrival of the victorious host some ghurabs from European ports had come to Cambay to buy and sell, and were about to return. On Sunday, the 10th, they decorated them and showed them to me. Taking leave they went about their business.' He concludes, 'As my desire was to see the sea and the flow and ebb of the water, I halted for ten days' and then went off to Ahmadabad.4

The Mughals, and other Indian rulers of large states, by and large pursued a hands-off attitude to trade in general, including that by sea. As Barendse puts it, the Mughals and the Safavids neither exploited trade nor encouraged it: they had very little in the way of a trade policy at all. 5 However, at times

merchant and ruler interests coincided, and then the state could help the merchant while helping itself. Studies by Om Prakash and Van Santen show a closer nexus between state and merchant in Mughal India than was depicted in my own earliest work. For example, the Mughals actively encouraged the importation of bullion, and also provided a very sophisticated minting process. 6 Om Prakash's characterisation of the essential element in Indian trade being that of 'bullion for goods' is completely appropriate. Obviously merchants were concerned to acquire bullion, but rulers also were concerned to accumulate their own stocks of precious metals. They also more generally wanted there to be plenty of precious metals in India. It seems that they shared some of the preconceptions of their European fellow-rulers at this time, that is that a rich country was one with a large stock of bullion. Given that few European products found markets in India, while Indian products had ready acceptance all over the Indian Ocean area and also in Europe, 'bullionist' aspirations were much more adequately achieved in India than in Europe.

The general attitude of most Indian rulers, whether Hindu or Muslim, seems to be one of a rather remote benevolence. Trade could certainly provide revenue, and more inchoately it was meritorious for any ruler to rule over happy, prosperous people, but actual intervention either for or against was most unusual. A Marathi treatise on statecraft from the early eighteenth century describes this sort of attitude:

Capitalists are the ornaments of the kingdom. The land is prosperous and populous because of them. Goods otherwise unavailable are procured through them. In times of crisis their loans enable the ruler to overcome difficulties. Protecting them brings great advantages. For this they should be respected and honoured. Do not allow them to be harassed or molested for any reason.

Similarly,

If a wealthy businessman is captured during raids on enemy territory or during sea expeditions, then he should pay a suitable ransom. Detain him until this is paid; when that is done treat him honourably and return him to his own land. It is not right to subject businessfolk to the severities reserved for the soldiers and employees of an enemy. 7

It has often been argued that the decline of great empires led to economic problems, including a decline in sea trade. The late Ashin Das Gupta was an

influential proponent of this thesis. He claimed that the decline, in the eighteenth century, of all three of the great Islamic empires – the Ottoman, the Safavid and the Mughal – affected Indian Ocean trade deleteriously. At the least these states had provided a certain stability and law and order, and had defended their borders against raids from outside. Locally powerful figures in all of them were to an extent controlled, and where possible their revenue raising activities (often more or less plunder) were curtailed in favour of the central state levying a more routine tribute or tax. This sort of predicability was obviously good for merchants. As the countrysides were monetised merchants had a larger role, buying the crop for money which the cultivator used to pay land revenue, and then on-selling the produce at a regional market. Merchants need information and communications, and large empires do too. Imperial networks of communication served not only to keep a ruler informed of events in distant places, they also made it possible for merchants to learn of distant markets, and to transmit funds via letters of credit. All this, we are told, was ended as these empires collapsed into anarchy.8

To demonstrate this conclusively would require much more quantitative research than has been done so far. But some things make one dubious of this blanket claim. For a start, sea trade as such was not affected by these declines, though certainly some port cities and some production areas were. The whole notion of Islamic decline in the eighteenth century has become a controversial one. Older European historiography wrote of decline, collapse and confusion, to justify conquest by the West. However, Ottoman decline in the eighteenth century is no longer universally accepted. So also in India, where the successor states of the Mughals were themselves perfectly viable. Even the Marathas, once stigmatised as lawless plunderers, have now been shown to be much more organised and benevolent than was once thought. In short, the whole notion of decline has been called into question.

In any case, to the extent that these vast empires were under stress, there were some compensations for trade and the economy. Most obviously, when the Mughal state began to release vast hordes of bullion accumulated over a century and a half, in order to fight its enemies, some parts of the economy obviously benefited from this increase in liquidity. In some areas it is clear

that traders simply tried to avoid unsettled areas and avaricious land holders: routes changed, but trade continued. For many traders the political situation was only one element which determined their success, and the areas to which they traded. More important in their prosperity or collapse were such eternal verities as whether or not their goods met local demand, and arrived at a time when the market was not glutted.

If, then, the notion that the decline of landed states caused a decline in sea trade is not proven, we need to look instead at the activities of the Europeans, and assess whether it was competition from them which led to problems for indigenous Indian Ocean traders. This is the central concern of much of this chapter and the next: for now we can quickly say that this was indeed the case, but beginning only in the second half of the eighteenth century. An acceptable compromise would be to try and find a combination of causes for the decline of Indian Ocean trade done by local people, including both political changes in the interior and competition from Europeans.

The first Europeans to arrive in the Indian Ocean in numbers, and in an organised fashion, were the Portuguese. In one respect their attitude to trade and politics differed profoundly from what we have found for both emperors and port polity controllers around the shores of the ocean, for by claiming sovereignty over the ocean they claimed to be able to control and tax trade. In another respect they mirrored closely the position of the port polity controllers, but not the landed empires, in that the vast bulk of their revenue came from the sea, not from land. I have chosen to write rather extensively about the Portuguese in the Indian Ocean. This is not to say that they had any profound effects there, but as so much of the historiography emphasises their actual or potential importance I have thought it necessary to locate them more correctly in their place and time. Such an analysis also casts much light on what else was happening, apart from the Portuguese presence, in the sixteenth century in the ocean.

The initial responses to the Portuguese varied from amazement to hostility to contempt. When the Kalabari people of the Niger Delta first saw white men, around 1500, they were perplexed.

The first white man, it is said, was seen by a fisherman who had gone down to the mouth of the estuary in his canoe. Panic-stricken, he raced home and told his people what he had seen: whereupon he and the rest of the town set out to purify themselves – that is to say, rid themselves of the influence of the strange and monstrous thing that had intruded into their world.

When the first Portuguese arrived in Colombo the locals reported to the king that

there is in our port of Colombo a race of people very white in colour and of great beauty; they wear jackets and hats of iron and pace up and down without resting for a moment. Seeing them eat bread and grapes and drink arrack, they reported that these people devour stone and drink blood. They said that these people give two or three pieces of gold or silver for one fish or one lime. The sound of their cannon is louder than thunder at the end of the world. Their cannon balls fly many leagues and shatter forts of stone and iron. 9

The ethnocentric Ming Chinese accounts from the later sixteenth century depicted the Portuguese as malevolent goblins who acted completely outside norms of accepted behaviour. One said,

So they [the Portuguese] secretly sought to purchase children of above ten years old to eat.... The method [of preparing the child] was to first boil up some soup in a large iron pan and place the child, who was locked up inside an iron cage, into the pan. After being steamed to sweat, the child was then taken out and his skin peeled with an iron scrubbing-brush. The child, still alive, would now be killed and having been disembowelled, steamed to eat. 10

The Portuguese arrived in the Indian Ocean with a background of equally fabulous ideas. Le Goff has written of the role of India and the Indian Ocean in medieval European thought. In these exotic fantasies there were fabulous riches, fearsome monsters, and even noble savages. 11 The *Travels* of Sir John Mandeville circulated widely in Europe from the first half of the fourteenth century, including Portugal. His book is a curious mixture of 'fact' and 'fiction'. He said there were Christians and Jews in Malabar, and the tomb of St Thomas in Coromandel. He wrote about the pepper vine, and widow burning, but also of eels 30 feet long, and 5,000 islands in the ocean. He reported that Indians did not travel very much as they were under the planet Saturn. Some of the flavour of his account is given when he noted that Hurmuz was very hot:

But it is so hot there in that isle that men's ballocks hang down to their shanks for the great violence of the heat, that dissolves their bodies. And men of that country that ken the manner bind them up and use certain ointments cold and restrictive to hold them up, or else they might not live. 12

Such benign fantasies on both sides soon gave way to harsher realities. The Portuguese identified quite quickly the main choke points and strategic places around the Indian Ocean littoral. Indeed, the early correspondence, histories and other accounts devote much effort to this sort of identification of where was vital to control. Goa (1510), Colombo (1505; a fort was built in 1518), Melaka (1511), Hurmuz (1515), Diu (1535) and Aden were seen as most strategically located to serve Portuguese ends, and all except the last were taken. These port cities were all flourishing before the Portuguese conquest, and all had strategic implications. Goa was centrally located to control the Arabian Sea. Colombo was strategically located, and provided access to cinnamon. Melaka and Hurmuz controlled choke points, and were also major emporia. Possession of Diu provided control over the entrance to the Gulf of Cambay, and access to the rich production areas around the eastern shore of the Gulf. In the case of East Africa, Mozambique in the south had several advantages. It was conveniently located to control trade on the southern coast, and to block trade from the hostile Muslim world down to the gold available in Sofala. Also, and here Mozambique was unusual as compared with the other ports which they conquered, it was to be the vital way-station for the *carreira* from the colonial capital of Goa to the metropolitan capital of Lisbon, fulfilling the same function that the Cape of Good Hope later provided for the Dutch. In theory this voyage was to be done in one passage, but in practice the great ships often needed to call in on the African coast to heal their sick, to get supplies, on the outward voyage to collect cargo for India, or to await the next monsoon. Mozambique became the vital link in the chain between Goa and Lisbon.

These strategic sites were acquired with several ends in view. Their conquest helped the Portuguese to undermine the Muslims who had previously dominated Indian Ocean trade, especially that in spices. They functioned as nodes in the vast seaborne network of the Portuguese maritime empire. They provided facilities for the vital armadas, and the carreira to Portugal. They were beach-heads from which conversion drives were launched. They provided places where the Portuguese elite could give

themselves fancy titles and indulge in an anachronistically feudal lifestyle, and from which they made vast private profits during their terms of office. In a more general sense the Portuguese were trying to create or impose a hierarchy *de novo* in the Indian Ocean. From a situation of autonomous port cities and free trade in which competition was economic but not military, they now wanted to establish an articulated structure where Lisbon controlled Goa, and Goa controlled all the conquered port cities. The nature of the political aspiration, and also its extent, has to be seen as quite revolutionary.

What were the Portuguese trying to achieve by these conquests? What they set up was not an empire, not even a maritime empire. Subrahmanyam and Thomaz note that

in the first half of the sixteenth century, 'Portuguese India' did not designate a space that was geographically well defined but a complex of territories, establishments, goods, persons, and administrative interests in Asia and East Africa, generated by or subordinate to the Portuguese Crown, all of which were linked together as a maritime network. 13

Within this network, the aim was very largely economic. From early on they unilaterally declared that all trade in spices was to be done only by themselves, or by people licensed by them. Offenders against this, that is the traders who had previously handled this trade, were to be severely punished, and their goods confiscated. To achieve this aim they captured a series of strategically located port cities, and patrolled the waters of the Indian Ocean searching for 'illicit' traders.

The patrols and the capture of ports had a wider aim also. The Portuguese wanted to direct, and tax, all trade in the Indian Ocean. The Portuguese required that all ships trading in the ocean take a licence, or *cartaz*, from a Portuguese authority. The key point was that the cartazes required Asian ships to call at Portuguese forts or towns and there pay customs duties before setting off on their voyage. What the ship could carry, and where it could trade, was strictly limited. In particular, Muslims from hostile areas, weapons, and spices were prohibited. Portuguese fleets cruised around checking all ships they came across. Those without a cartaz, and those who infringed its terms, were subject to confiscation at best, and sinking at worst.

This system was a vast protection racket, for the Portuguese were selling protection from violence which they themselves had created. Obviously it was most effective only when the Portuguese had established customs houses at which the Asian traders could call. This took some time, and this ameliorated the harshness of the system. They were established quite early in Cochin and Goa, later in Diu, and much later again in Daman and Chaul. This in turn shows two things about the Portuguese system. First, while the Portuguese presence remained fundamentally maritime and littoral throughout, this is not to say that the priorities of this empire did not change, for they did. Around mid century the focus moved from one looking to the carreira and the trade to the metropole towards a much more Asian-centred one where, for example, the aim became to encourage and tax Asian trade rather than try to control it too closely. Second, the Portuguese were unable to conquer large areas of land, and so had to make their money from the sea. Hence this system, and hence their great reliance on maritime revenue. In this they contrast strongly with a landed state, such as Gujarat. The Portuguese Estado da India got fifteen times more revenue from sea trade than from land trade. Portuguese India got about 60 per cent of its total revenue from customs duties, Gujarat got only 6 per cent. Revenues derived by the Portuguese from their control of Diu made up a large part of official receipts. The surplus from Diu, in a good year late in the sixteenth century, provided about one-sixth of Goa's total revenue. Similarly, when trade between Gujarat and Hurmuz was blocked by war, the puppet sultan of Hurmuz had to send a much smaller contribution to Goa, as most of Hurmuz's trade was with Gujarat. As a final illustration of the unequal nature of the relationship, the route from Goa to Cambay was the most important of all for the Portuguese, even more than the carreira to Portugal. However, from the Gujarati point of view this trade made up only a small part of total trade, roughly 5 per cent. 14

We will turn to the matter of the success of these aims presently, but first we need to consider two controversial matters. The first area of controversy is, how did the Portuguese justify this system, and second, was this justification one which we can accept? The great chronicler João de Barros set out the justification. The Portuguese were, in Asia, lords of the sea, and made all other ships take a safe-conduct licence, or cartaz, from them. Ships

trading to enemies of Portugal could be seized on sight. By common law the seas were open to all, but this applied only in Europe to Christians, who were governed essentially by the principles of Roman Law. Hindus and Muslims, on the contrary, were outside Roman Law as they were outside the law of Jesus Christ, which all men must keep to avoid the eternal fire. Further, Hindus and Muslims had no claim to right of passage in Asian waters, because before the arrival of the Portuguese no one had claimed the sea as hereditary or conquered property. There being no preceding title, there was no present or future right of passage. 15 The concrete manifestation of this came early, when in 1499 the Portuguese king Manuel gave himself the title of 'Lord of the Conquest, Navigation and Commerce of Ethiopia, Arabia, Persia and India'. The late Charles Boxer several times pointed out dryly that at this time the Portuguese had no ships at all east of the Cape of Good Hope.

To investigate the legitimacy of this claim, we need to consider whether there had indeed been any previous attempt to establish control, sovereignty, or even just suzerainty over the Indian Ocean. And we need to decide whether or not the copious violence which the Portuguese used to enforce their aims was new in the ocean.

The juridical matter is rather complicated. When the Portuguese sailed into the Indian Ocean in 1498 they carried with them baggage from the Mediterranean, such as the Roman claim to Mare Nostrum, and generally a tendency towards thalassocracy. As Mollat noted, from very early times in Europe 'the domination of the sea was a natural objective of maritime cities.'16 In 1498 they entered a body of water which was almost completely mare incognita to them. They also implicitly considered it to be mare *liberum*, that is, as Barros noted, a sea space which had not been claimed by any previous state or other body. The distinction between *mare clausum* and mare liberum was set out by Grotius in the early seventeenth century, acting as a supporter of Dutch pretensions at sea. However, the notion of mare *clausum* can be traced back to the mid fifteenth century. The key question in evaluating Portuguese claims is to decide whether control over the Indian Ocean had already been parcelled out among the existing maritime powers, or was it a free international highway? Alexandrowicz finds that there was freedom of navigation on the high seas. Grotius ridiculed the Portuguese claim that they had now occupied the high seas, for many others had sailed over it before them. Yet Grotius seems here to be setting aside the Portuguese claim that while certainly people had travelled over the sea before 1498, no state had claimed either sovereignty or even suzerainty. Thus, he said, the Indian Ocean before Europeans entered was *res communis*, that is open to all.17 This has a nice echo of the modern concern with the notion of the sea as the last of the Commons.

If this be accepted, then it has to be argued that the Portuguese claim had, in their eyes, some validity; there was no preceding right of passage claimed so they could do it, and if necessary use force. There was a juridical vacuum which they could fill if they chose, which they did thanks to their own notions as set out above.

The second area of controversy concerns the existence, or prevalence, of state violence in the Indian Ocean before the Portuguese arrival. We discussed this matter at some length in the previous chapter (see pages 97–9). To sum up, there certainly had been violence at sea before the Portuguese arrived. Piracy was very widespread indeed, and took a heavy toll on merchant shipping. We will say more about this presently. There even are a few instances of Asian states at this time or in the past using sea power, such as Srivijaya, and the Cola state. However, it does not seem that any of these powers had very effective navies. We should see their maritime efforts as being completely adjunct to their land ones: their navies were only auxiliaries to their armies. Similarly, the controllers of the various port cities, such as Calicut, Melaka, Cambay, Hurmuz, made no attempt to force ships to call to trade. It is not too much of an exaggeration to say that the Portuguese introduced state controlled violence into the Indian Ocean.

Some Portuguese violence was not directly done by the state, but was tacitly accepted. Professor Thomaz wrote that,

Whereas the chief aim of the system of control set up by the Portuguese in the Indian Ocean was attained only in parts, its by-products seem, on the contrary, to have developed beyond all expectation. We refer mainly to extortion, bribery, peculation and piracy. The Bay of Bengal, which lay virtually out of reach of the Portuguese authorities, was the ideal ground for such activities. 18

He sees violence as implicit in the whole Portuguese presence in the Indian Ocean, especially in the matter of privateering. These state-sanctioned fleets could plunder ships outside the Portuguese system, and the proceeds were divided up among the officers and crew of the successful ship according to set shares laid down by the state. I would extrapolate a little more from this important point than Thomaz is prepared to do. The Portuguese unilaterally dictated a closed Indian Ocean, and then the king, instead of having to pay his men to enforce this, instead let the victims pay by letting his soldiers plunder those who infringed. This sounds very precisely like the sort of protection racket one gets in many societies, where a criminal element collects protection from shop keepers in return for not breaking their windows. Analogous to this is the failure to capture Aden. It could be that this suited Portuguese captains very well. They could patrol and plunder, seize prizes and take bribes; had Aden been Portuguese these opportunities would have been reduced.

One way to demonstrate that peaceful trade was the accepted norm in Asian waters is to see how locals responded when first faced with European demands. What we find is surprise at such unprecedented notions, which clearly flew in the face of accepted practice at the time. The Portuguese in 1502 tried to get the ruler of Calicut to expel his 'foreign' Muslim traders, but he responded that he could not do this, 'for it was unthinkable that he expel 4,000 households of them, who lived in Calicut as natives, not foreigners, and who had contributed great profits to his Kingdom.' A century later the ruler of Surabaya, in eastern Java, was asked by the Dutch not to trade with the Portuguese as they were enemies, and he replied 'that he could not help it that we were in enmity with the Portuguese and that he did not wish to be in enmity with anyone; also that he could not forbid his people to trade, as they had to support themselves by it.' Later in this century the port of Makassar greatly increased its trade, and the Dutch noted that local merchants flocked there because the ruler 'treats those same foreigners very civilly' and allowed all to trade 'freely and openly, with good treatment, and small demands of tolls.' Unimpressed, the Dutch conquered the port city in 1669.19

A Muslim inhabitant of Kerala, the famous Zain al-Din, wrote a vigorous denunciation of the Portuguese, as indeed did his brother in a long poem. 20

His vitriol can be contrasted with the benign, wondering, attitudes which greeted the first Portuguese. By the late sixteenth century the locals knew and feared them. He wrote how they attacked ships sailing outside their system, and of course roundly condemned this. He detailed the atrocities the Portuguese committed on Muslims, and added:

In addition to this system of persecution, also, these Franks sallying forth in the directions of Gujerat, the Conkan, and Malabar, and towards the coast of Arabia, would there lie in wait for the purposes of intercepting vessels; in this way, they iniquitously acquired vast wealth and made numerous prisoners. For, how many women of noble birth, thus made captive, did they not incarcerate, afterwards violating their persons, for the production of Christian children....21

If we accept that Portuguese violence was new, how can it be explained? The precedent we should look at is not a spurious claim of existing violence in the Indian Ocean, but rather precedents from Portugal's European and Moroccan experience. It is often claimed that the Portuguese, unlike their interlocutors in Asia, had been hardened by their long struggles against Muslim enemies, struggles which had no exact counterpart for their Muslim adversaries in the Indian Ocean. As just one example, the Mapillahs, the local Muslims in Kerala, had no tradition of anti-Christian struggle.

The Portuguese anti-Muslim bias was clear, and openly acknowledged in the sixteenth century. It derived from memories of the struggle to free Portugal from Muslim rule, and from the previous North African service of many of the Portuguese, a service consisting of a hard and brutal struggle with Muslim enemies in which atrocities like mutilation of corpses were common. Several authors have pointed to this having a unusually brutalising effect. The author Richard Hall in his recent survey claimed that

The Moroccan crusade in the final decades of the fifteenth century was to set the pattern for Portugal's behaviour in later conquests much further afield. Many of the young knights – the noble *fidalgos* – received unforgettable lessons in plundering, raping and killing without mercy. They came to accept that the lives of Muslims, men, women and children alike, counted for nothing because they were the foes of Christendom. 22

Diffie and Winius put it in a wider context of disregard and contempt for all non-Christians, but at the end again point to Morocco as the formative experience: 'it is wise to remember that Europeans of the age were almost

completely without feeling for non-Christian peoples and had little interest in or understanding of cultures other than their own. For the Portuguese especially, nearly a century of vicious fighting in Morocco had brutalised attitudes'.23 So also with L.F. Thomaz. He notes numerous European precedents for Portuguese actions in the Indian Ocean area, such as privateering to Ceuta and further south. North African precedents were taken around to Asia. 'As Morocco was used as a military training ground for young Portuguese noblemen, most of the captains who served in India had substantial experience of marauding activities and considered these as honourable, worthy of reward from the king, and even of religious merit.'24

We can use the concept of a frontier society, so fruitful in North American and Australian historiography, to illuminate the Portuguese experience in Asia. The setting, surrounded by 'teeming hordes' of 'natives', contributed to make Portuguese society in general rough, violent and extravagant. In the Portuguese settlements this was exacerbated by an unusually high proportion of soldiers and sailors in the total population. These men were usually discharged and left without pay during the monsoon months when sea patrols were impossible, and at these times especially Goa and other areas were notoriously dangerous.

The strains inherent in a frontier society, and particularly the need for solidarity among the greatly outnumbered Portuguese, was most clearly seen in the way deserters were treated. In 1512 Bijapur attacked Goa. They were beaten off, and had to surrender nineteen Portuguese deserters who had fought for them. Albuquerque had promised not to kill them. He kept his promise, 'but I ordered their noses, ears, right hands and left thumbs to be cut off, for a warning and in memory of the treason and evil that they did.' On this same occasion Albuquerque had another captured renegade burnt alive. Possibly such draconic punishments were not inflicted later, yet certainly many sixteenth century Portuguese authors commented unfavourably on the large number of former soldiers or householders who had chosen to leave Portuguese areas, and more importantly those who had become renegades, that is had not merely left but now provided military service to enemies of the state.25 True that it is here a matter of violence to fellow Portuguese rather than to Asians, but this merely reinforces how violent this society was, whether to each other or to the Asian 'Other'.

To complete this study of violence we need to consider piracy, which was prevalent in the Indian Ocean both before and after the arrival of the Europeans. We have already noted piratical activities by some of the Portuguese. In Bengal a ballad went,

The dreaded Portuguese pirates, the Harmads, were constantly watching the movement of these [grain] boats [in the delta], stealthily following them through the nooks of the coast. They plundered the boats and assassinated their crew, and the boatmen and captains of the seaside trembled in fear of the Harmads.26

They were followed by other Europeans. One of the first English pirates, or perhaps corsairs, in the Indian Ocean arrived in 1635 in two ships, with a royal licence to plunder 'from the Cape to China and Japan, including the Red Sea, the Persian Gulf, and the Coromandel coast.' Two years later they returned to England with booty worth £40,000. The mate of one of the ships was David Jones, who liked to scuttle captured ships; hence the sea is sometimes referred to as Davy Jones' Locker.27

But who is a pirate? To the Portuguese, anyone flouting their system of trade control, most notably the Mapillah traders in Malabar, were pirates. Today we see these people as traditional traders who perforce tried to avoid the Portuguese system and continue trading in pepper and other products just as they had done for centuries. We will later find many other examples of Europeans stigmatising their competitors as pirates, and thus 'legitimate' objects of attacks by navies (see pages 198–9). Regardless, a strong case can be made that the trade control policies of the Portuguese substantially increased piracy, for many Asian traders were dispossessed, and turned to piracy simply in order to survive. This applies to the Malabar traders whose spokesperson was Zain al-Din.

Pirates are a very varied lot, and the attitude of states to them also varied. Some operated with tacit or even open state acquiescence, and so must be seen as corsairs. In 1610 the Sheikh of Qadil, on the Makran coast, allowed piracy, but it had to be focused and controlled. In particular, the Portuguese were not to be targets, as their ships routinely called at the port to get refreshments. The sheik and the pirates agreed to let them alone. So also in Malabar, where at times the rulers of Calicut knew of the activities of the Kunjali corsairs, and at others did not, or claimed not to. Nor were all

navies really that opposed to piracy. Mitchell points out that in the early eighteenth century in the Caribbean naval ships quite liked having piracy in the area. The crews of the men of war hired for escort duty were well paid, and could carry freight — illegally — at a premium as they were considered to be very safe. And in any case pirates never attacked a guarded merchant convoy. So also in the Indian Ocean, where Portuguese crews and captains sometimes, for a price, turned a blind eye to piracy.

Similarly with merchants, who often were happy to tacitly support piracy in order to acquire dubious, 'hot' goods. Writing from Kedah, Bowrey said:

Anno Domini 1675. A Small Vessell belonginge to the English was Sent from Achin hither laden with very fine goods, and was mett with the Pyrats.... They Sett Upon her and killed Samuel Ware, the master and two more of his men, and tooke the Vessell, which done, they Sent away the Other Seamen in a Prow bound for Achin and came boldly Up to Queda and Sold the goods to Sarajah Cawn [Suraj Khan], a Chulyar, and chiefe Shabandar of Quedah, an rogue Enough too. This Rogue by reason he bought them very Cheape made noe question how they came by the goods, although he Saw English marks and Number upon Each particular baile.30

Piracy can be a sign of flourishing trade. They can be seen as macroparasites, human groups that draw sustenance from the toil and enterprise of others, offering nothing in return. As parasites they do best when trade is flourishing as then hosts are readily available. Pirates also move depending on how easy the pickings are. Many European pirates, such as Captain Kidd, moved from the Caribbean to the Indian Ocean in the late seventeenth century. The most celebrated capture in this 'pirate round' of the last decade of the century was that of the Mughal ship the *Ganj-i-sawai*, in 1695, taken by Captain Every and four other pirate ships off the mouth of the Red Sea. The ship carried a huge and valuable cargo, including jewels and a saddle and bridle meant for the Mughal emperor Aurangzeb. Among the passengers were many pilgrims, some of them elite people and even relations of the emperor. The women were raped, the ship plundered, and some 400 pirates got the huge sum of £1,000 each.31

Piracy is thus an international matter, and also a slippery one, for one person's pirate is another's legitimate trader, or even 'freedom fighter'. So also with an analysis of the success of the Portuguese presence in the Indian Ocean in the sixteenth century. We need to distinguish several levels of

their activity, in several different places. But the obvious place to start is with a survey of their attempt to monopolise the trade in spices, for this was their prime ambition, and their success or failure here can stand as a model of their total achievement in the century.

By monopolising Asian trade in spices the Portuguese hoped to achieve two, related, goals. 32 When they arrived they found that most of the trade was done by Muslims. To dispossess these traders was to strike a blow for the True Faith, that being Christianity. Perhaps more important, a monopoly would mean that the Portuguese could buy cheap in Asia and sell dear in Europe, a happy conjunction indeed of God and Mammon. In the first few decades of the sixteenth century the Portuguese got close to achieving this aim.

The profits could be enormous. Historians have produced many estimates. One finds that the Portuguese paid 6 cruzados for a quintal of pepper in Malabar, including the cost of freight. The minimum price in Lisbon was 22 cruzados, producing then a profit of 260 per cent. Another costing adds in an estimate for wastage and still finds profits of 150 per cent. Even if the cost of the forts in Malabar which made possible the Portuguese monopoly are deducted, we are still left with profits of 90 per cent. In 1505 prices were fixed in India and in Lisbon. Pepper cost 3 ducats per hundredweight in India, and sold for 22 in Lisbon. Other ratios are: for cinnamon 0.75 to 19; cloves 7.5 to 60–65; nutmeg 4 to 300. Later in the century the Portuguese bought cinnamon in Sri Lanka for as little as 15 cruzados the quintal, and sold it for at least 75, and sometimes 100. Godinho has tried to put the spice trade into a more comparative perspective. Around 1515 the spice trade made profits for Portugal of about 1,000,000 cruzados. This was equal to all ecclesiastical revenues, and was double the value of trade in gold and metals.33

Portuguese success marked, for a while, a reorientation of where Europe got its spices. Lisbon replaced Venice, at least temporarily. This was clear to see early on. In 1502–3 twenty-four per cent of Hungarian copper exported by the great Central European bankers the Fuggers went to Antwerp, but in 1508–9 the figure was 49 per cent, and this was used to pay Lisbon for spices. In 1501 the Portuguese captain Cabral came back to Lisbon with a

good cargo of spices, and the king, Manuel, told a Venetian envoy he should tell Venice 'that from now on you should send your ships to carry spices from here.' Venetian authorities predicted gloomily that 'There is no doubt that the Hungarians, Germans, Flemish and French, and those beyond the mountains, who formerly came to Venice to buy spices with their money, will all turn towards Lisbon.'

Yet by the middle of the century the Levant trade had revived, and the Portuguese share of the supply to European was falling fast. In the earlier sixteenth century the Portuguese took some 20,000 to 30,000 quintals of pepper to Europe each year. By the end of the century this had fallen to about 10,000 quintals, while Aceh in 1585 was sending 40,000 to 50,000 quintals of spices, mostly pepper, a year to the Red Sea, and so to markets in the Middle East and the Mediterranean. In 1515 the Portuguese took 30 per cent of Malabar production, but by the end of the century only 3 or 4 per cent.

What had gone wrong with the Portuguese effort, that the Levant was able to revive, in Braudel's words that by mid century 'The Mediterranean was recapturing the treasures of the Indian Ocean?'34 The Portuguese had to conciliate several local rulers by allowing them some trade in spices. Existing traders, especially the Mapillahs of Kerala, boldly evaded Portuguese fleets. Much pepper was traded by land, where the Portuguese had no control. Finally, the failure to take Aden left open an easy route for spices to reach the Red Sea, the Middle East, and the Mediterranean.

However, it was not just spices that were traded between Asia and Europe in the sixteenth century. Another very important product was bullion. The Spanish in the Americas exported large amounts of gold across the Atlantic to Iberia from early in this century, and from mid century even vaster amounts of silver, especially from the incredibly rich mine at Potosí in Peru. Much of this bullion flowed through Europe and so on to the Indian Ocean and Asia. However, again the Portuguese and the Cape route were far from being dominant in this trade. It is clear that much more bullion came into the Indian Ocean area via the Red Sea than came around the Cape of Good Hope. There certainly was a vast drain of bullion from the Mediterranean to

the Indian Ocean, but most of this was not handled by the Portuguese, a matter we will return to presently.

To modern eyes and susceptibilities the official claims and actions of the Portuguese in the Indian Ocean in the sixteenth and seventeenth centuries seem to represent a presence which is more or less totally reprehensible, not in any way to be condoned or justified. They found a peaceful open trading system, and tried forcefully to monopolise some parts of it and control and tax the rest. It looks like a black, completely unacceptable, picture.

Yet the reality on the ground, or at sea, was very different. As we noted, the Portuguese were in Asia to buy spices cheap and sell them dear in Europe, thereby undercutting the traditional Mediterranean route. To forbid this trade to all others was one thing, and in any case this effort met with little success, as we saw. But the Portuguese still had to be able to buy the spices themselves, for they monopolised, partially, sea trade only, and not land trade, let alone production. Nor did they have the domestic resources to be able to send large amounts of money out from Portugal. This requirement, to find money to pay for the spices, meant that the Portuguese were soon intricately linked into the country trade of Asia.

East Africa provides an excellent case study of this matter. The Portuguese quickly found out that a commodity which could be used to pay for the spices was available in East Africa, namely gold from the Zimbabwe plateau. If they could secure supplies of this, or better still a monopoly, then payment for spices would be no problem. But it soon also became apparent that gold had to be paid for too. It could be acquired only in exchange for goods, and not Portuguese goods either.

Similarly with East Africa's other prized export, ivory. Here the Portuguese had no hope of controlling supply, for elephants were hunted in very far-flung areas. However, perhaps they could block its export. But they still had to be able to pay for it. The only items in demand on the plateau and elsewhere were beads and cloths from Gujarat; these were the traditional trade items which the producers of gold and ivory wanted, and here, as in so many other areas, the Portuguese then had to fit in to existing patterns. A continuing supply of Gujarati cloths to East Africa was essential in their wider designs. Thus were the Portuguese immersed in an intricate web of

country trade in the Arabian Sea, in this case cloths from Gujarat to exchange for gold and ivory which then could pay for spices which then could be extracted from the Indian Ocean network and sent outside it to European markets.

A more detailed analysis area by area confirms this overview, and also shows a considerable variation in Portuguese policies, and successes, over the sixteenth century. In particular, later in the century the concern was more to encourage and tax trade than to restrict it too rigorously. Most recent studies stress that increasingly during the century the Portuguese looked to trade rather than conquest, that they became immersed in Asian life and economics, while the connection with the metropole became more and more tenuous. We will first sketch the political impact of the Portuguese around the shores of the ocean, and then turn to their effect on trade.

In East Africa south of the Sahara the only major state was the Mutapa state or Monomotapa, located in the area which is now Zimbabwe. This state had no sea access, though it produced large amounts of gold and ivory which were taken down to the coast, to Sofala or Kilwa, and then exported. The Portuguese had very little effect on this trade. They tried to monopolise it, but achieved very little. Gold exports had been in decline before they arrived, and this decline continued in the sixteenth century. Ivory was an important export for the Portuguese, but this product was also traded by various Muslim groups. Later in the sixteenth century the Portuguese penetrated far inland up the Zambezi valley. One of the first was the intrepid Jesuit Father Gonçalo de Silveira, who was killed at the Mutapa court in 1561. Later other Portuguese established estates, or *prazos*. Sometimes these recognised the authority of the Mutapa ruler, sometimes they did not. The Mutapa state declined in the seventeenth century, and Portuguese activities may have contributed a little to this.

Moving north, the Portuguese had various diplomatic and military dealings with the Ottoman Turks. This strong and expansionist Islamic state was a source of great concern for the Portuguese authorities. In the first half of the sixteenth century it took over Egypt and the Red Sea area, including the Islamic holy places. It also established itself in Iraq, in the area around

Basra and Baghdad. A small Turkish fleet raided the East African coast in the 1580s, and caused the Portuguese much concern: they responded by building the huge Fort Jesus in Mombasa. Much more famous was the expedition to Diu in 1538, where a strong Ottoman fleet acting in conjunction with Gujarati forces besieged the Portuguese fort, and were defeated only with very great difficulty. The Ottomans remained a feared adversary for the rest of the century. However, this land-oriented power was much more focused on the Mediterranean and the Middle East, especially Iran, than on the Indian Ocean, and Portuguese fears were largely unnecessary.

The next major state with which the Portuguese had contact was Safavid Iran. This state was founded in 1500, just as the Portuguese were establishing themselves in the Indian Ocean. It fought a series of wars with the Ottomans in the sixteenth century, and for this reason the Portuguese tried to have good relations with the Safavids, and encouraged them to confront the Ottomans. Pepper was allowed to pass through the Straits of Hurmuz to Iranian ports, and silk was provided by the Persians in return. Yet this tacit alliance was built on sand, for in 1622 the Safavids and the English combined to take over Hurmuz from the Portuguese.

The Estado da India's main interlocutors were two important Indian Muslim states, Bijapur and the Mughal empire. Bijapur was contiguous to the Portuguese capital of Goa; indeed Goa had been conquered from them in 1510. Relations were tense throughout the century. The local controllers of Ponda, right next to Portuguese territory, were often a worry, while in 1570 Bijapur joined in a major attack on Portuguese areas. It may have been because of these tense relations that Goa did not trade very much with Bijapur. One major trade item, cotton cloths, was obtained from Gujarat in preference to Bijapur, and Goa's food came mostly from the Kanara area further south. Certainly Portuguese activities had very little influence on the progress of Bijapur. The area was conquered by the Mughals in the 1680s, but the Portuguese played no role in this.

As they came to terms with the Indian Ocean trading system, the Portuguese very soon realised that their relations with Gujarat would determine the success or failure of their wider aims. Central was control of

the trade in spices, yet while Gujarat produced no spices its merchants played a large role in the trade in these products all the way from Melaka to the Red Sea. So also with the second strand of Portuguese concern with Asian trade, the cartaz system. If this were to work anywhere, it would be in Gujarat, where most of the great ports in the Gulf of Cambay could be monitored by Portuguese fleets cruising off the mouth of this narrow gulf. Another central aim was to acquire goods, other than spices, which could be sent back to Lisbon on the carreira. Gujarati cloths came to make up a very large part of the homeward bound cargoes. Finally, as the Portuguese got more involved in the inter-Asian trade they realised that access to products from Gujarat was vital, for they were widely known all over seaborne Asia and found a ready market wherever the Portuguese travelled.

Like the other great Islamic territorial states, the Mughals concentrated on the land rather than the sea. This meant that most of the time Portuguese maritime activities did not bother the Mughals. On occasion the Portuguese would attack or capture a ship belonging to the Mughal elite, and then the Mughal state would respond. However, the main area where the Mughals were concerned was the pilgrimage to Mecca. The port of Surat, one of the most important ports in the world, was the main exit point for Indian Muslims going on hajj, and the Mughals were concerned that this passage not be blocked. On the other hand, the Portuguese knew that their forts in Gujarat, in Diu, Daman and Bassein, were vulnerable to attack from the land. Equally important, Goa relied on Gujarat for the bulk of its export products, and especially cotton cloths. They could not afford a long war with Gujarat, and nor could they allow any blockade to go on too long, for this would mean that Portuguese trade all over the Indian Ocean and to Europe was denied goods to trade. In effect it was a stand-off, with both sides prepared to be conciliatory most of the time. The Portuguese tacitly allowed the hajj passage to continue, and gave the Mughals 'free' passes for some of their ships. Portugal's other contact with the Mughals had to do with their well-known attempts to convert the emperors. The Jesuit missions to the court failed to achieve this, but their activities have provided us with some fascinating accounts of life at the Mughal court.

In southeast Asia the Portuguese were not faced with any major maritime or territorial power, but this was not the case in China. The Ming dynasty there was powerful in the sixteenth century, and extremely ethnocentric. Foreigners had to behave with due subservience to Chinese officials, and the Ming accounts present the Portuguese as cannibals or malicious goblins. The Portuguese were very much in an inferior position. In the early 1520s a Portuguese fleet was heavily defeated by a Chinese coast-guard fleet. Later, in the mid 1550s, they were allowed to establish themselves in Macau, but always on terms of strict subordination to Ming officials. From late in the century, however, the Portuguese were able to fill a gap and profit from a very lucrative trade which linked Macau and Japan.

The conclusion has to be that Portugal's relations with major states around the Indian Ocean in the sixteenth century were mostly civil enough, in part because the maritime interests of the Portuguese seldom conflicted with the major interests and activities of these land-oriented states. Certainly it is impossible to see the arrival of the Portuguese as affecting the progress or decline of these states in any significant way.

If the political consequences of the Portuguese presence were relatively minor, what can be said of their economic impact? On the East African coast they were trying to disrupt, and take over, a well-integrated trading system. Once Portuguese intentions became clear, the existing Muslim traders sometimes worked in cooperation with the Portuguese, but many of them continued their trade in locations outside of Portuguese control. Given the length of the coast, and tortuous navigation especially in the vast and complex Zambezi delta, the Portuguese found it very difficult to do much about this. At different times three ports, Angoche, Mombasa and Pate, were able to keep going a trade which flouted the Portuguese and in effect continued the preceding system of open and free trade. In the first decades of the sixteenth century the Portuguese became aware that Angoche had become a major centre of trade from the ports further north, and was underselling the Portuguese in Mozambique and Sofala very substantially. To counter this the Portuguese established themselves on the Zambezi itself, at Sena and Tete, and also on the coast at Quilemane. Mombasa however continued to send ships south, laden with Gujarati goods, until this flouting of Portuguese aims together with their fear of the Turks led them to take this town in 1593. But no sooner was one gap closed than another opened, for now Pate and other ports in the Lamu area became centres of opposition

and 'illegal' trade, despite several Portuguese attacks in the seventeenth century.35

When we move to the southern shores of the Middle East we find a rather different situation. In terms of markets there was one major, but temporary, change as a result of the activities of the Portuguese. For a few decades they were able by and large to monopolise the trade in pepper and spices, and this meant that markets which dealt in these commodities – Aden, Jiddah, Basra on the Gulf, Cairo and Alexandria and Aleppo on the Mediterranean – suffered, as did the Muslim traders who had dominated this trade. However, the Portuguese monopoly had been largely broken by mid century, and these markets revived as a result. Aden suffered more than most, and indeed even after it was taken by the Ottoman Turks in 1538 it continued to decline, while a major new market, the port of Mocha inside the Red Sea, rose to prominence.

Moving along the Hadhramaut coast, there seems to have been little change in the predominantly coastal trade of this region. However, this was not the case for Hurmuz. This port city and major market, controlling the mouth of the Gulf, was taken by the Portuguese in 1515. The intention was to block the spice trade up the Gulf, and so overland to the eastern Mediterranean. However, the Portuguese needed to conciliate the Shah of Iran as a counterweight to their main enemy, the Ottoman Turks, and so they allowed some pepper to continue to pass through and into the Gulf. Nevertheless, Hurmuz certainly suffered a decline, and was no longer a major market populated by very diverse merchant communities. Many of them moved to Basra, or to the Persian port of Bandar Abbas.

In Sind the major port was Lahari Bandar, favoured by private Portuguese traders and Muslim merchants. The greatest markets, and the most dominant merchant communities, were to be found in Gujarat. Portuguese fleets were able to patrol across the entrance to the Gulf of Cambay, from their bases in Daman and Diu, and exercise quite close control over shipping entering and leaving this entrance to the great Gujarati ports of Surat, Cambay, Gogha and Broach. This patrolling, and also the demonstrations of military and naval ferocity from 1529 to 1534, and again after the second siege, from 1546 to 1548, convinced most of Gujarat's

merchants that they would have to take cartazes and pay duties at Diu. Indeed, there is clear evidence of the Portuguese and the Gujarati traders cooperating and being prepared to be flexible when this was necessary. The Portuguese allowed trade to the Red Sea, even though this area was considered to be a hostile Turkish Muslim one. They also tacitly allowed the pilgrimage trade to continue. Indeed, they even accepted cargo valuations, on which customs payments were based, which were done by the Gujarati merchants themselves. Portuguese flexibility combined with Gujarati acquiescence to produce a quite harmonious relationship in which Gujarati ships routinely called at Diu to pay customs and collect their cartazes.

Overall then the changes in Gujarat's trade during the sixteenth century were rather slight. This however does not apply completely to the first port city we come across as we move south and east. In the late fifteenth century Diu had become a great market, dominated by Turks. Large trading ships called here to collect Gujarati products, and those from further east, in exchange for goods from the Middle East and Europe. The capture of Diu was a central aim of the Portuguese, and this was achieved in 1535. In consequence the Muslim merchants left. Diu now became just a place where Indian Ocean ships were forced to call in and pay customs duties. Its role as a market declined. The main merchant communities were now Hindus, collectively often called banias, and Jains from Gujarat. In the great port city of Cambay some hundred or so private Portuguese settled, usually married to local women. They joined a very heterogeneous mosaic of merchants. The internal economy – the inland traders, the bankers, the shopkeepers, the brokers and the main 'capitalists'- was dominated by merchants who were Hindus and Jains. Many of these people also loaded cargoes on ships, and settled overseas, even in the Muslim-dominated Red Sea area, but the main sea traders were Muslims. Most of these were now local people, descendants usually of local converts to Islam, though many wealthy foreign groups, from Shiraz, the Red Sea, and even Turkey, were also there. The effect of the Portuguese on the activities of these people was slight. For the Portuguese Gujarati goods from Cambay and other ports were vital to make up the cargoes for Portugal, especially the large private cargoes sent home on the great naus, which were overwhelmingly cloths

from Gujarat. This however made up only a very small addition to the total trade of Gujarat.

In any case, Cambay declined during the century because the Gulf of Cambay, at whose head it was located, silted up. Large ships found it more and more difficult to get to Cambay. It was replaced by Surat, which was also favoured by the integration of the independent sultanate of Gujarat into the Mughal empire in 1572 (see page 34). By the end of the century Surat was the greatest market in India, in the Indian Ocean, and indeed maybe in the whole world. Here were found the fabulously wealthy Hindu and Jain merchant communities which so many Europeans wrote of so admiringly. Here also were found products from all over the world, including those which the Portuguese hoped to monopolise. There was a host of merchant communities: not only Hindus and Jains (and these anyway were often subdivided according to caste or to economic speciality) but also Armenians, Jews, Portuguese, and Muslims from Persia and Turkey.

The economic relationship between Gujarat and Goa was quite assymetrical. From the Portuguese side, trade with Gujarat was vital and essential, so much so that even the most martial governor had to realise that wars with Gujarat could not be allowed to go on for too long, for a protracted war would be disastrous for the economic health of Portuguese India. João de Castro's reprisals after the end of the second siege of Diu, in 1546–48, drew a barrage of complaints from residents of Goa whose trade was blocked by his actions.

Two elements can be distinguished. Some of the Portuguese settled in Gujarat were agents for rich merchants in Goa, others traded in a small way on their own account. Their main task was to acquire cargoes for the several convoys of small trading ships which each year went from the Gulf of Cambay to Goa. Two or three such convoys sailed each year, guarded from pirates by Portuguese warships, and with 200 or more ships in each one. These convoys were absolutely central for the economic health of Goa. Most of the cargoes sent home on the carreira were goods from these convoys. The private fortunes of many of Goa's residents, including senior political and ecclesiastical figures, depended on these fleets of small trading ships.

Further peaceful and mutually beneficial ties were formed by Gujarat's role as a major money market in the Indian Ocean area in the sixteenth century. Its great Hindu and Jain merchants provided loans quite impartially to traders, rulers, anyone with good credit, and many Portuguese took advantage of their vast resources. Here also is an element of reciprocity; rather than the din of battle, the heroic sieges, it is these economic transactions, deals, accommodations, which show the real nature of relations between Portugal and Gujarat in the sixteenth century.

Along most of the west coast of India coastal trade was dominant, with small local ships carrying goods to the major nodes, of which Surat and Goa were the most important. As one example, the area of Kanara was a rice surplus region which provided food to other areas all up and down the coast, and indeed as far as Hurmuz. The next major market that we must notice is the Portuguese capital of Goa. Goa was analogous to other exchange markets in that it drew very little from its hinterland. Rather, its vaunted sixteenth-century prosperity was a result of Portuguese policies. It was the focus of their military-economic attempt to centralise Indian Ocean trade in their ports. The result was that Goa rose from being a relatively minor port to be a major exchange centre, based on coercion. Within the Portuguese system Goa was most important as their capital, and as the place where private traders could collect cargoes for their trade both within Asia and also to Europe on the state-owned or licensed naus. Yet although Goa had the advantage of military backing from the Estado da India, as a market it ranked far behind the great ports in Gujarat. At its height in the late sixteenth century Goa's trade was worth at most one-tenth of that of all the ports of Gujarat, and Surat alone far outtraded Goa. As the Estado declined in the next century the gap widened: Surat alone around 1640 had four times the trade of Goa. It and the other Portuguese port cities were, in terms of merchant communities, atypical in one important respect, in that alone in the Indian Ocean world they had no important Muslim groups. This was the result of the Portuguese antipathy to Muslims in general, and Turks in particular. Goa was ruled by the Portuguese, but its internal economy was dominated by a caste of Saraswat Brahmins, while its main financiers were banias from Gujarat.

Goa was also the home of a considerable number of other European merchants who had come to feed on the Portuguese body. Some of these people were very substantial. They often held the most important of the government tax farming contracts, and syndicates of them ran the pepper trade for the state later in the century. One of the biggest was Ferdinand Cron, a German who had a great trade in Goa in the late sixteenth and early seventeenth centuries. He acted as agent for substantial merchant houses back in Europe as well as trading on his own account. Part of his success was based on his control of information, achieved through a network of couriers which enabled him to be first with news of markets and prices. This network, which he took over from the Fuggers, went from his home town of Augsburg to Goa (a distance of over 8,000 kms) and on to Melaka and Macao.36

The Kerala or Malabar coast was the second great area of concern to the Portuguese, for this is where they got pepper, and the naus for Portugal sailed from Cochin. There were several major changes in this area as a result of the Portuguese presence. Calicut, at 1500 the greatest market by far, and dominated by pardesi Muslims from the Red Sea and Cairo, declined as a result of Portuguese attacks. These foreign Muslims moved out to safer parts. The local Muslims, that is local converts called Mapillahs, perforce stayed, and continued to try to trade in pepper outside the Portuguese monopoly system. Cochin became a Portuguese puppet town, and a centre of their trade in pepper. The town included a large casado population, but trade except that to Portugal was dominated by Gujarati merchant groups, and locally by Malabar Hindu groups.

Sri Lanka was a somewhat aberrant part of the Portuguese estado, for it was only here that they attempted a large land conquest. The island was valued both for its strategic location, and for its monopoly supply of true cinnamon. Colombo was considered to be one of the lynch pins of the whole Portuguese system. Yet here also their sea patrols were unable to achieve a monopoly over the export of cinnamon. Encouraged by the conversion of a local king, the Portuguese later in the sixteenth century became embroiled in major land wars. These were unsuccessful, and their

cost contributed in a major way to the increasing financial straits of the estado at the end of the century and later.

The Bay of Bengal was an area where the official Portuguese writ ran lightly. The most important port had been Pulicat, and during the sixteenth century the Portuguese dominated this and the neighbouring port of San Thomé, especially the very lucrative trade to Melaka. Consequently, local traders moved to Masulipatnam further north, which became the greatest market in the whole Bay of Bengal. This is yet another sign of the way local merchants could avoid the Portuguese, in this case by moving from Pulicat to Masulipatnam, in others from Diu to Surat, or Hurmuz to Bandar Abbas, or from Sofala to Mombasa. Masulipatnam drew on an extensive and productive hinterland in the sultanate of Golconda. Here the main merchant communities were Hindu groups like the Klings and Chettis, others Muslim such as the Chulias, but also some Gujaratis yet again and Persian Muslims. Further north in Bengal the main market was Chittagong, and later Hugli. While the local economy was controlled by indigenous Bengali traders, long-distance trade often was dominated by people from outside. For example, trade to the major market of Melaka was done by Kling merchants based in Melaka, and the pepper trade by Persians.

At the end of our tour we reach one of the greatest port cities, Melaka. This is another example of a market dominated entirely by foreign goods; very little came from the interior area of the Malay peninsular. Rather, goods from literally all over the world were available there. We noted above that there were four major merchant communities in Melaka at the time of Albuquerque's conquest in 1511. Portuguese control affected them considerably. Their attempts to centralise and tax trade led to an exodus, especially of the Gujaratis, who moved off to more welcoming and less corrupt ports. In particular, the decline of Melaka led to the rise of Aceh, in northern Sumatra, which during the century became a major centre for trade, especially pepper from the east and Indian products from the west.

How then can we sum up changes in Indian Ocean trade in the sixteenth century as a result of the Portuguese presence? The key word must be continuity. Most things did not change. Markets and trade remained controlled, at the most fundamental level, by the monsoons. The major

markets needed either to be located adjacent to major production areas, as in Gujarat, or at choke points, such as Aden, Melaka, and Hurmuz. The goods traded in these markets changed little. The great mass of the trade remained coastal trade in humble port markets strung all along the littoral of the Indian Ocean. As to the dominant merchant communities, variety remains the key. A host of traders, both pedlars and princes, traded across the ocean.

In areas controlled more or less tightly by the Portuguese, that is the west coast of India, Muslim traders faced formidable opposition and moved away. Other communities were little affected. As to markets, at least four formerly important ones declined once they were taken over by the Portuguese: Sofala, Hurmuz, Diu, and Melaka. To be sure, Hurmuz and Diu had large surpluses from customs duties, but these resulted not from their roles as markets, but from Portugal's coercive trade control system. Calicut, while not taken over, was badly affected by Portuguese attacks. The only success was Goa, which prospered thanks to concentrated Portuguese efforts; but we must remember that its trade was, as noted, only one-tenth of that from Gujarat's ports. In any case, Goa's success was entirely dependent on the success of Portuguese trade control policies, and once these were challenged and rendered nugatory by the arrival of the Dutch Goa fell into decline, as also did Diu. We must now sketch changes in the seventeenth century.

By the middle of the seventeenth century the Portuguese official position in the Indian Ocean area was in tatters. Most of its major forts – Melaka, Cochin, Colombo, Hurmuz – had been lost, usually to the Dutch. On the East African coast the Estado da India retained toe holds only in Mozambique, and Mombasa until the 1690s. Elsewhere it kept only Timor, Macau, and Goa, Daman and Diu on the west coast of India. In part the estado now moved from being a maritime entity to a land based one, for the northern provinces of Bassein (until lost to the rising Indian power, the Marathas, in 1739) and Daman became flourishing agriculture-based areas where many Portuguese did well: as the saying goes, rich men in a poor state. More important, the private Portuguese traders, the casados, continued to trade as they had done in the sixteenth century. The only

difference was that while in the later sixteenth century they had loaded large private cargoes on the naus for Lisbon, they now, as the carreira declined, were forced to focus almost entirely on the Indian Ocean. They were to be found all around the Bay of Bengal, on the west coast of India, and along the Swahili coast. Like the private English traders, they by and large enjoyed no particular advantage over their Asian competitors. While the state declined, private Portuguese continued to operate. As British power expanded later in the eighteenth century they, like for example the Parsis, operated within its entrails, serving as middle men, petty traders, facilitators for the dominant British.

With this broad background, we can turn to the vexed question of the importance of the arrival of the Portuguese in the Indian Ocean. I will look at several themes, but very briefly. We must first note that the linkages that the Iberians established were vast and pregnant with consequences. The Spanish linked the Americas and Europe, and via the Pacific the Americas and East Asia. The Portuguese connected southern America with Africa and Europe, and also the north and south Atlantic, as well as the Atlantic and the Indian Oceans. (Later the Dutch linked the far western part of the Indian Ocean, the Cape, with the far east, that is western Australia and Indonesia.) Men began to travel widely, and serve these far-flung Iberian empires in many continents. Duarte Coelho Pereira served the Portuguese state in Morocco and West Africa. In 1509–29 he was in India, and this period included voyages to China, Vietnam and Siam. Then he returned to Portugal and was Portuguese ambassador to France, after which he had various navy commands. In 1534 he became the lord-proprietor of the captaincy of Pernambuco in northeast Brazil, where he remained for twenty years.37

Impressive and far-flung connections indeed, yet in the case of the Indian Ocean we must remember that Asia and Europe had been linked for centuries via the Red Sea and Gulf. Rome had an extensive trade with India 2,000 years ago. Later, Asian products continued to get to the Mediterranean and European markets. Spices were the most important here. Europeans needed them to preserve meat, and to flavour it. This was certainly an important trade for the European consumers, and for the Asian producers and traders. It was also important for the Mamluk rulers of

Egypt, for a significant amount of their revenue came from taxing this trade.

Some historians claim that while certainly there had been some contact before 1498, commercial connections between Europe and Asia were greatly strengthened because the Portuguese had discovered a new, faster and more efficient route to join the two, that is the route around the Cape of Good Hope. It is true that the Cape route was, at least in theory, faster than the more difficult route from the spice production areas in the Malukus, across the Indian Ocean, up the Red Sea, and then overland to Alexandria. The Cape route also was cheaper, because taxes did not have to be paid to land controllers en route, especially the Mamluks. Furthermore, at this time sea transport was substantially more cost-effective than was transport over land (see page 29).

In practice it turned out that the Cape route was not really so much better. It was, after all, a long and arduous sea voyage which took many months. Quite often Portuguese ships were lost on the way, or had very long passages. Mortality was very high, so that often ships from Portugal had to stop over in Mozambique to cure their sick before they set off again for India. Many of the naus were overloaded, and the cargoes poorly stowed, so that the spices and other cargo reached Lisbon in very bad condition. Between 1497 and 1590 about 171,000 people, mostly Portuguese, left Portugal for India. About 17,000 were lost to shipwreck and disease en route, while of the 105,000 who set off to return to Portugal, 11,000 never made it. During the same period a similar 10 per cent of ships were lost. This data points to a quite high, but not surprising, attrition of men and ships.38

There are two other matters that we need to consider in this context. First, European historians have written extensively about changes in the spice trade to Europe. What we can say here is that this trade was no doubt important for Europe, but not nearly so much for Asia. Only about one-tenth of Asia's total production of spices went to Europe. Most of them were consumed within Asia. China, for example, was a huge customer for ginger and pepper, as was the Mughal empire. To focus only on the spice trade to Europe is to ignore the bulk of this trade, which was never destined

to go anywhere near the Mediterranean. The Portuguese had very little control of this intra-Asian trade.

It could be that we are using the wrong geographical categories here. I have been writing of 'Asia' and 'Europe', but maybe this familiar terminology disguises more than it elucidates. When we write about this early modern period there is often an undertone of a successful dynamic Europe as compared with a static, even backward, Asia. We might do better to think of an area called Eurasia. This would include the eastern Mediterranean, and would take in part of the Ottoman Empire. The area then extends down through Egypt to the Red Sea, and so into the Arabian Sea. These areas have all been intricately linked for centuries, even millennia, by trade and the movement of people. If we take this perspective then we could say that the Cape route opened up an alternative to trade within Eurasia, but that this route did not take over from the more traditional ones for some time yet.

But surely the Portuguese, being Europeans, stood out in Asia? Surely many of their feats, and many of the things they introduced, could not be emulated by Asians? Well, not really. One of the few areas where the Portuguese were unusual was in their naval prowess, for they had mastered the art of mounting cannon on board ships. This ability enabled them to achieve considerable maritime success all over the Indian Ocean, though they certainly never came near to controlling the seas and all ships on them.

In a more cultural area, it is sometimes claimed that the Portuguese brought the fruits of Renaissance Europe to India. This is a problematic claim. First, Portugal did not share fully in the series of developments collectively known as the Renaissance, mainly as the Church, and the Counter-Reformation, were too influential. The persecution of Portugal's important Jewish population, which caused many of them to flee north to the Low Countries, persisted after those who remained had converted. This had long-term effects on Portugal's intellectual life. As a specific example, what of the printing press, often considered to be a great symbol of the whole loosening up of the dissemination of knowledge which is characteristic of the Renaissance? A printing press arrived in Goa in 1556, thanks to the Jesuits. By 1679 it had published forty books, but only three of these were on secular subjects. The most famous of these is the work by Goa's great

savant, Garcia d'Orta, *Colloquios dos simples e drogas*. The other thirty-seven were all on religious subjects, and some of them were mere anti-Jewish or anti-Hindu propaganda. And it is symptomatic that d'Orta's work had much more impact on the rest of Europe than it had in Portugal.

If we take a very long-term view, can we say that the Portuguese opened the door for other Europeans to come in and change Asia profoundly? Were they harbingers of a future when most areas in Asia were colonised by Europeans powers, with very dramatic and deleterious consequences? Again this claim is difficult to sustain. As we have been pointing out, in many areas the Portuguese had no particular advantage over the Asian states and peoples with whom they had dealings. They were, if you like, as premodern or early modern as anyone else. Generally speaking, westerners had no superiority in any area at this time. This was obviously the case in terms of culture, society or religion, and it would be racist to say otherwise. However, this also applies in material matters, such as the production of goods, trade practices and technology. Inequality appeared only when western Europe industrialised, and for the first time we have a rich world and a poor world. This happened only from late in the eighteenth century. One consequence of industrialisation in the west was that they now had the technological capacity to take over large areas of Asia, and this is what happened. However, my argument is that the increasing economic and military power of the west led inevitably to their colonising Asia; this would have happened even if the Portuguese had not rounded the Cape in 1498. The Portuguese effort then must be seen as a tour de force, that is a prodigious effort which however had no flow on and no consequences – in short, a one-off achievement.

The reasons for this comparative failure have been much debated. Earlier British writers said it was hardly surprising that this happened, for the Portuguese were corrupt, inefficient, racially mixed, cruel, and Catholic! Of course this is nonsense. Several more cogent factors can be isolated. First is simply the vast and unachievable nature of their aims. They were trying to control a huge maritime space, as any glance at a map will make clear. The population of Portugal around 1600 was about 2,000,000, while Akbar ruled an empire of over 100,000,000. Some Mughal cities had populations of 500,000. Goa in 1600 totalled 60,000, of whom 1,500 were Portuguese

and mestiços (people of mixed blood). In the last quarter of the sixteenth century there were about 14,000 to 16,000 Portuguese beyond the Cape of Good Hope. In short, one basic reason for the Portuguese failure was simply a lack of people.

This meant that they consistently had to take account of facts on the ground which constrained them very severely. For example, the King of Malindi was not always as loyal as they hoped, and he had to be allowed to continue his own trade with Gujarat, although this undermined Portuguese control in the south. On the East Africa coast the Portuguese always had to be concerned to conciliate local rulers, whether it be those in the immediate hinterland, or the far distant ruler of the Mutapa state, to whom the Portuguese paid the *curva*, or a form of tribute, in order to be allowed to trade in his territories.

Sometimes the Portuguese were hampered by their lack of knowledge, and new conditions which affected them. An example of each is gold, and disease, in both cases in relation to East Africa. As to the former, the Portuguese thought that gold on the plateau must come from great mines, just as silver came from Potosí. If they could find the mines they would be able to control them and monopolise gold exports. Dos Santos described well their disappointment once they realised the true situation:

When the Portuguese found themselves in the land of gold they thought that they would immediately be able to fill sacks with it, and carry off as much as they chose; but when they had spent a few days near the mines, and saw the difficulty and labor of the Kaffirs, and with what risk and peril of their lives they extracted it from the bowels of the earth and from the stones, they found their hopes frustrated.39

Gold was mined and washed only as a part-time occupation by the Shona, being done more or less on need when cloth was desired. The activity was very dispersed; there was no central mine that could be controlled, and nor could the actual producers be forced to mine full-time and provide large quantities. Couto recognised this, in a somewhat back-handed way. 'As the Kaffirs are numerous, they always obtain a great quantity [of gold] although they are by nature so indolent that when they have found sufficient to buy two pieces of cloth to clothe themselves, they will not work any more.'40

As for new conditions, while the Portuguese adapted to some parts of this new environment, such as the monsoon pattern, in other areas they found it difficult. The best example is disease, which laid a heavy toll indeed on Portuguese manpower. This was made worse by Portuguese clothing and diet. Mozambique Island in particular was notoriously unhealthy, with literally hundreds dying in its hospital. The building of this hospital had been seen as a prime necessity even as the fort was being built in 1507, yet the mortality rate was very high.41 Nor were other areas much better. In 1528 Nuno da Cunha's fleet travelled up the east coast. He was on his way to India to be viceroy. He left 200 sick Portuguese in Zanzibar so they could recover. Then he wintered in Mombasa with a force of 800 men. Of them 370 died during the 'winter' months. 42 Ironically, it seems that the Portuguese suffered more from African diseases than did Africans from European ones. Certainly the arrival of the Portuguese did not unleash the devastating epidemics which resulted from the arrival of Europeans in Oceania and the Americas. Most East Africans seem to have had some immunity to Eurasian endemic strains. This may have been a result of the movement south of Bantu people, or the penetration of immunity from the coast to the interior. It seems that East Africa was more closely connected to Eurasian, or perhaps in this context Afrasian, disease pools than were the Portuguese.

Portuguese efforts were not helped by what seems today to be inefficiency, and even corruption. Peculation was rife in the state; every office holder expected to make large profits from his three-year term. It is a question of whether corruption is the correct term to use, for ideal standards of official conduct today are hardly an appropriate measure to assess the standards of the Portuguese, or anyone else, in this early modern period. However, there is no doubt that Portuguese officials very often engaged in conduct which was highly detrimental to the interests of the state. It could be that the underlying cause here, while in part to do with pre-modern notions of appropriate official behaviour, was also a result of the way the Portuguese presence was by no means a monolith. Rather, there were various layers and interests, many of them in competition with official policy, and among these were even the officials themselves quite often. Officials had to serve the king and his trade, but had also to think of their own trade, for most of the

time their pay for a post included extensive trade privileges. In 1604 an official decree complained of this, noting that the captains of Mozambique too often ignored their obligations to guard the fortress and instead spent their time up the Zambezi river looking after their own trading interests. Then the captains were faced with householders in the forts, who all traded, and then again by transfrontiersmen (more correctly transfrontiersfolk, for some were women) who were completely outside the system.

The captains of Diu frequently took bribes in return for allowing 'illegal' trade. One even sold off cannon from the fort to enemies of the state. The prevailing attitude was well expressed by a newly appointed captain of a fort, who visited a religious house to say goodbye. One of the clerics counselled him: 'Be content with what is yours, favour the poor, and do justice.' The captain retorted that he fully intended to get all he could, as did all the others, 'because I am not going to my fort for any other reason than to come back rich.' The great chronicler Diogo do Couto summed up the state of the administration late in the century when he wrote 'for the king's property to increase, it should pass through few hands, and the fewer hands of officials it has contact with the greater will be its increase.'43

Finally, can one mount a counter-factual case that the Portuguese would have done better to engage in peaceful trade? There is adequate evidence that the initial Portuguese demands for control and even monopoly went quite contrary to accepted practice in the Indian Ocean. We have earlier written extensively about how trade was conducted before the Portuguese (see pages 97–9), and can merely add here a little detail from East Africa. There is some evidence that trade there was in something like a state of nature when the Portuguese arrived. Barros claimed that when Gama reached Mozambique he was greeted by a native of Fez, who said the custom of the sultan 'was when strange ships arrived to send and enquire what they sought; and if they were merchants they might trade in that country, and if navigators bound to other parts he provided them with whatever was to be had there.'44 Four years later, in Sofala, the Portuguese claimed that they wanted peace and friendship, and to be treated like all other merchants in this port. The ruler replied that this was quite acceptable. All merchants were welcome, as he derived much profit from them. The Portuguese were welcome to trade on the same terms as everyone else. 45

Godinho has discussed this matter in his magisterial work. He says that in 1501 and 1502 the Portuguese got access to the gold trade of Sofala without using violence. But beginning in 1505, with the arrival of Viceroy Almeida with his very militant instructions, this all changed for the worse, and the policy became one of loot and plunder, compulsion and forced monopoly.46 The reasons are various, but one problem was that in East Africa the Portuguese claimed that there was serious opposition to their presence from Kilwa and Mombasa. This however was a matter of chickens coming home to roost, for the ruler of Kilwa had been influenced by Muslims from Calicut, who had told him of the barbarities the Portuguese had inflicted on this Indian port city.47

Even at the time some contemporary Portuguese commented on this strange mixture of trade and violence. One simply noted that 'war is contrary to trade', another, a Venetian on Cabral's voyage in 1500, said, 'If you wish to trade you do not rob competitors' ships', and in 1532 a noble noted that 'To trade and fight are more opposed than the north and south poles.'

Sometimes Portuguese violence was clearly counter-productive. They produced one inveterate opponent in the ruler of Cannanore after they sewed up his nephew and six others in a sail and threw them overboard to drown. According to one contemporary the tyranny of the Portuguese captain of Diu caused a frontal attack on the fort from the neighbouring state of Gujarat. 'The captain of the fort caused the siege of Diu because he behaved so badly to the king of Gujarat and the local Muslims that if they had been Christians they would have had good cause to become Muslims.'

It is probable that the Portuguese could have traded on a basis of equality in all the major Asian port cities. As we noted, these thrived by welcoming all, and providing facilities for trade. Certainly existing traders would have competed hard, but on past performance it seems unlikely they would have been the first to use force. As for the rulers, initially they, before Portuguese intentions became clear, were happy to welcome them as another group of foreign merchants come to trade and so increase their customs receipts.

Peaceful trade would have had economic consequences, apart from the obvious moral ones. The huge expense of the fleets and forts would have

been avoided. A Venetian ambassador as early as 1525 noted the consequences of the huge expenditure on military and naval matters:

Having had information concerning the affairs of Portugal, I believe first of all, as has been affirmed to me by men most familiar with the kingdom, that that King has a far smaller sum of money than is commonly believed, for he spends a very large sum in maintaining that voyage to India, and the needs of the various fortresses and diverse fleets, which cost him a considerable amount of money....48

The Portuguese could have sat in Calicut, just as the Middle Eastern merchants, the pardesi, did and not have to go to southeast Asia. Or they could have followed the very successful Dutch model of the seventeenth century. The Dutch East India Company certainly used force in the Maluku Islands in order to get a monopoly on fine spices, but they made more money from more or less peaceful involvement in the 'Country Trade'. Indeed the Portuguese did this to an extent. If we look at areas where the Portuguese were more successful, these turn out to be the same as areas where there was less crown interference and consequently much less use of violence. Leaving aside the intercontinental trade, much local country trade in Asia made large profits both for the Portuguese state and for private Portuguese. The voyages between Japan and China, and on to Melaka and India, made vast profits, and these were not based on the sort of exclusionism characteristic of the carreira back to Portugal. In many ways the Asian empire operated independently of the metropole, self-financing and self-controlled. Right outside of it thousands of private Portuguese trafficked more or less successfully as part of the rich warp and weft of traditional Asian trade, participating on a basis of equality with the vast array of others engaged in the same sorts of trade, with no particular advantages or disadvantages.

It is even likely that if the Portuguese had achieved a monopoly on the supply of spices to Europe, this would have caused little concern or interest amongst Asian traders. Muslim merchants would have continued to trade with their co-religionists from the Malukus to Egypt, retaining control of some 90 per cent of the total trade in spices, for Christian Europe consumed less than 10 per cent of total production. But alas, this strategy of peaceful mercantile competition was never tried, for the reasons outlined above

(pages 120–2) relating to Portuguese aims, and Portuguese preconceptions. There was, given these, no option but attempts at monopoly based on violence.

Not everyone will accept these arguments about the basic flaws in Portuguese designs. Nevertheless, it is interesting that many Portuguese in effect acted in the same way as I have argued the state should have; in other words, they 'went native' and operated quite happily and profitably *outside* the Portuguese system, and *within* the existing indigenous one. We will come to this matter of accommodation and mingling presently, but first we must introduce the northern Europeans.

The Portuguese claimed, or at least their poet Luís Vas de Camões claimed, that Gama sailed through seas never before sailed. This was true enough if one follows a passage from Lisbon around the Cape of Good Hope to about the modern Delagoa Bay, but not from there on across the Indian Ocean. So also with the Dutch. They followed the Portuguese. Their novelty consisted in their 'discovery' of the roaring 40s and fearful 50s in the southern ocean. Once they were established in Indonesia they soon learnt to keep south of the Cape, and scream across the southern ocean to the west coast of Australia, then head north to Indonesia. This route had never been sailed before, except possibly by Indonesians returning from Madagascar, but we noted earlier that this claim seems to be quite fanciful (see pages 60–1).

The Dutch and the English were concerned to break in on the trade pioneered by the Iberians.49 Their attitude to trade was often as positive as that of the most rigid free-market economist of today. In 1711 Joseph Addison, in an essay called 'Trade as a Civilising Force', wrote in a strikingly benign way that

Nature seems to have taken a particular Care to disseminate her Blessings among the different Regions of the World with an Eye to this mutual Intercourse and Traffick among mankind, that the Natives of several Parts of the Globe might have a Dependence upon one another, and be united by their common Interest.50

The wonder of the East, now focused on products rather than mysteries and the fabulous, was well expressed by Samuel Pepys:

My Lord Broucker and Sir Edmund Pooly carried me down into the hold of the India ship, and there did show me the greatest wealth lie in confusion that a man can see in the world. Pepper scattered through every chink, you trod upon it; and in cloves and nutmegs I walked above the knees; whole rooms full. And silk in bales... as noble a sight as ever I saw in my life. 51

In the following sketch I have taken to heart a powerful admonition from the late Denys Lombard. He wanted to

underline the importance of preventing the study of the companies from being separated from the Asian context in which they were formed and developed. When seen from Europe, they doubtless appear to be autonomous institutions of wonderful effecacity, heralding the colonial empires of the nineteenth century. When seen from Asia, they seem first and foremost to be uncertain attempts on the part of newcomers to find their way as best they could into a system which had been in existence for centuries. 52

Thinking back to the typology we sketched earlier in this chapter, the Dutch and English, like the Portuguese, acquired some ports, and many trading posts (known as factories) in existing ports, and at times they moved to the second stage, where they participated in production in the interior. But their move to the third stage, where they controlled politically the interior, in most areas came later in the eighteenth century. Specifically, while Europeans established ports on the Coromandel coast, such as Chennai, this did not mean that they did well in local trade, and nor did they outcompete native ports. So also on the west coast of India. Mumbai was set up by the British in the 1660s, but it took seventy years for it to overtake the great port of Surat. The *coup de grâce* was military rather than commercial: in 1759 Surat was taken over by the British. And so also in Indonesia: Jakarta (Batavia) won only after the Dutch conquered Makassar.

The Dutch had some decades of maritime experience behind them, especially in the Baltic and North Sea, before they ventured to the Indian Ocean late in the sixteenth century. They had also done well in the distribution within Europe of spices brought to Lisbon by the Portuguese. When Spain conquered Portugal in 1580 their access was restricted, and this seems to have been the main motive for the decision of some Dutch seafarers to go direct to the source of the spices. Early returns were excellent, leading to an uncontrolled rush: in 1598 twenty-two ships owned by five different trading companies went to Asia. One of these companies

ended up making a profit of 400 per cent. Economic and political elites (the two were intertwined) realised that intra-Dutch competition was inefficient. To solve this problem the state encouraged the merchants to combine, and in 1602 the VOC (Dutch East India Company) was formed. The state gave it a monopoly over trade to the Indian Ocean. We see here two important characteristics of the Dutch effort. Their Asian presence was located in a trading company, not in an arm of the state. Yet there was an indirect nexus between state and company, in that the state sold off to the company quasi state rights in Asia, and in return the state profited from the success of the company. So also in the Indian Ocean, where the company adroitly mixed skilful trade with the selective use of military force. In this they were much more focused, and hence more effective, than were the Portuguese.

The English experience was a rather muted copy of the Dutch. They also had maritime experience, including the activities of semi-pirates like Drake and Hawkins. In 1600 the EIC (English East India Company) was set up, but with much less capital, and apparently much less commercial expertise, than the Dutch had. The EIC much more than the VOC was modest about trying to be warlike. One official noted that the 'worst of peace is better than the best of war'.

Portugal resisted the intrusion of the northern Europeans, but in most places was unable to hold out. The English played a secondary role, while the Dutch conquered a string of Portuguese forts: Melaka in 1641, Colombo and all of Sri Lanka in 1658, and all the Malabar ports in the 1660s. They also established trading posts in existing ports on both sides of the Indian coast, and in 1619 took the minor Javanese port of Jakarta. Renamed Batavia, this was considered to be well located to act as their capital in the area.

Like the Portuguese, the Dutch aimed to control the spice trade. Ironically, they had considerable success, but finally failed for many of the same reasons as the Portuguese. Their capital, determination, ruthlessness and force gave them early success, which led to the end not only of the Portuguese trade via the Cape but also of the overland trade to the Levant. It was a sign of the times when as early as 1600 the Portuguese unloaded six carracks in Lisbon carrying a large pepper cargo. They found them hard to

sell, for their traditional markets in northern Europe were already well supplied by large Dutch shipments. 53

On the face of it the Dutch achieved considerable success, but actually their achievement in controlling the pepper trade was less than that for the fine spices, where they finally achieved something close to a total monopoly. In large part this was because, unlike pepper, the fine spices grew in restricted areas. In Sri Lanka the Dutch obtained their first cargo of cinnamon in 1638, and the sale price in Amsterdam was nearly double the purchase price. After the Portuguese had been driven out of this island, by 1658, the Dutch, now having a complete monopoly, thought they could charge what they liked. They raised the price from 15 stuivers to 36 in 1658, and later to 50. Overall the profits were huge. Anthony Reid claims that by the mid seventeenth century the VOC could sell spices in Europe at about seventeen times, and in India about fourteen times, the price which they had paid in Maluku, and he notes that none of this profit went to any Asian.54

Cinnamon, cloves, nutmeg and mace made up the VOC 'famous four' spices. As a Frenchman wrote in 1697, 'No lover is as jealous of his mistress as the Dutch are of their trade in spices.' In the Maluku islands, home of the last three fine spices, the Dutch behaved with great ruthlessness. Under governor Jan Pieterszoon Coen (1619–23, 1627–29), pursuing his 'policy of frightfulness', they deported much of the population of the Bandas, and then moved in Dutch settlers supported by a vast slave population drawn from such scattered areas as East Africa, Persia, Bengal and Japan. 55 In 1636 on one of these islands, as a result of Dutch severity, there were only 560 natives left, together with 539 Dutch and 834 free foreigners. To overcome the labour shortage they had to import 2,000 slaves from Arakan and Bengal. On other Banda islands all nutmeg trees were cut down so as to avoid the possibility of smuggling. Their policy in the clove producing areas was equally bloody, indeed was too successful, for so well did they limit production that in 1665 there was a shortage of cloves. Production was closely controlled. In 1710 the directors of the VOC noted 'with grief' that the most recent harvest of cloves on Amboyna was likely to be 1.85 million pounds. They did massive extirpations in order to get production down to an 'acceptable' level of about 500,000 pounds.56

Competition from other Europeans was slowly overcome. The English held on in Bantam until 1682, and after this in Benkulen in southwest Sumatra, thereby retaining some access to pepper. The Spanish left Tidore only in 1663, while the end of the Portuguese was symbolised by their loss of Melaka in 1641. The end of any competition for cloves, nutmeg and mace was achieved in 1669 when Makassar was conquered, and from then on the Dutch made vast monopolistic profits from these spices: several hundred per cent, and even up to 4,000 per cent. Their control of the clove trade is shown by the way they were able to charge one fixed price for this product in Europe from 1677 to 1744. Better still, the Dutch were able to overcome the common problem faced by Europeans trading in Asia. Few European products found any market in the Indian Ocean area, yet in a bullionist age the export of precious metals was seen as undesirable. But the Dutch were lucky, for their sales of spices in Asia produced profits which then could be used to buy goods to send back to Europe.

Yet this rosy picture, for the Dutch, contained its own problems. There were difficulties both in Asia and Europe, and these combined to reduce profits in the eighteenth century, as most dramatically shown by the bankruptcy of the VOC in the 1790s. First, we need to remember that pepper was always the main product. In Europe demand for pepper in the seventeenth century was some 7 million lbs a year, while for the 'famous four' together it was only 1,000,000. But the Dutch never completely controlled pepper. The reason was that pepper was produced in several different areas, not all of them controlled by the Dutch. For example, in the very large producing area on India's southwest coast Dutch power was restricted to the seashore; much pepper escaped their control inland. A Dutch commander in 1664 set out the aim in a letter to his subordinates:

Considering that the pepper trade is the bride around which everything dances, we recommend Your Honours to bend your best efforts to bring great quantities of Malabar pepper into Company hands every year... while at the same time you should prevent the indigenes from transporting it elsewhere by sea or land in secret.

At least in Malabar the Dutch were faced with the same problem which had hindered Portuguese efforts in the region, namely that the production areas were inland, and European power was effective only on the coast and at sea.57 Even VOC control over the Malukus was achieved only at an ultimately too high price. One problem was that about one-third of the production of these fine spices was sold in Asia, as also was pepper, and so the VOC had to make delicate calculations of prices in Asian markets: if their prices were too high then Asian purchases declined, but if they were too low then other Europeans would buy in India and ship to Europe.

There was also the cost of enforcement, and of preventing new production areas. As early as 1663 a Dutch official noted ominously that 'Out of these [pepper trade], the heavy expenses which the Company has borne for such a long time, and which it is still forced to carry, have to be paid.' Smuggling was a particular problem and even some of the VOC's own servants indulged in this, just as had the Portuguese a century earlier. Slaves on the Banda islands and their Dutch masters, the perkeniers (concessionaires licensed by VOC who had local mothers), were adroit smugglers, so the cost of enforcing the monopoly was huge, especially as slightly inferior long nutmeg grew on other islands and could be substituted. The VOC became a bloated and overly rigid body, with a vast and expensive military and civil establishment. The number of employees in the east rose geometrically: in 1625 there were 2,500, around 1700 the number had risen to 13,000, and by mid century there were 20,000 civil servants and troops.58 More generally, Dutch success, at its height from about 1680 to 1720, meant that they did not get into ultimately more profitable trades in cotton piece goods, tea and opium. Piece goods especially had a much wider market than spices, both in Asia and after mid century in Europe also.

There were also problems in Europe. We have noted that European consumption of spices was more or less static throughout the seventeenth century, or possibly even declined a little. The problem was that the huge increase, at least a doubling, in European consumption of spices in the sixteenth century meant that as they became cheaper and more available they were no longer a symbol of wealth and luxury. Their prestige declined and relatively they were less used. New luxuries and stimulants competed with or even replaced spices: coffee, chocolate, cocoa, alcohol and tobacco. New vegetables (asparagus, spinach, artichokes, tomatoes, pimentos, melons) varied the European diet, so spices were less needed to ginger things up. It seems that meat consumption in Europe declined, and also

simpler cooking styles were more in vogue. In short, ironically, the VOC monopoly turned out to be a Trojan horse; they controlled products whose value was falling, and ignored humbler but ultimately more productive goods.

This Dutch impact on the spice trade was atypical. Recent work tends to emphasise that in most areas for most of the time we must still stress continuity, at least up to the mid eighteenth century, when the British began to acquire land in eastern India. From this time the whole equation changed and the Indian Ocean area was increasingly dominated by Europeans, and especially the English. Asian markets were undercut by port cities located in colonial areas; Asian merchants were displaced by Europeans backed up by armed force and by a state which ruled all of India and other areas around the Indian Ocean.

We can see some signs of these changes in the 150 years between the arrival of the northern Europeans and the mid eighteenth century. These apply more to the location of the major markets than to changes in merchant communities. Broadly speaking, over this period we see the rise of new port cities, major markets, which were ruled by Europeans. Often some coercion was employed to attract or force Asian traders to use these new markets. In Indonesia the best examples are Jakarta, the capital of the Dutch East India Company from the 1620s, and Melaka, conquered from the Portuguese in 1641. In India the most obvious examples are the three great port cities, each of them created more or less from scratch by the English East India Company: Chennai in the 1640s, Mumbai in the 1660s, and Kolkata in the 1690s. The rise of these new ports, and the increasing volume of European trade around the Cape of Good Hope, left many traditional ports in the Arabian Sea bereft. Most of the Swahili ports sunk into stagnation. Aden and Hurmuz continued to decline. On the west coast of India the once great Surat was replaced by Mumbai by the 1730s, though here it is worth remembering that it took Mumbai seventy years as a British port before it could outrank Surat; the traditional port cities did not give up easily!

Merchant communities often demonstrated considerable flexibility. They were prepared to move to new markets. Late in our period many Surat merchants moved to Mumbai; Coromandel merchants to Chennai; and

merchants from many parts of India to Kolkata. Gujarati merchants also moved in to Zanzibar, and played a major role in its economy, being for example responsible for collecting customs. As another example of a change, the Parsi community in Surat had been of only minor importance in the trade of the town until late in the seventeenth century. They then acquired a larger role as agents of the increasingly dominant English. Members of this merchant community also moved to Mumbai and became major figures in the trade of this port in the eighteenth century. There were however dislocations, and new groups rose under the expanding influence of the Europeans. The Dutch attempt to monopolise the trade in fine spices from the Malukus was more or less achieved by the middle of the seventeenth century, and the traditional Malay traders were displaced. However, Indian merchants continued to trade to Indonesia, and were able to circumvent Dutch attempts to block their trade.

Local rulers responded in different ways to the activities of the northern Europeans. In the landed empires they were in a situation of subservience. In China they traded only on the sufferance of the port authorities, and were very closely supervised, not to say humiliated. In the Red Sea and Gulf they had to deal with less powerful states, especially once the Safavid empire unravelled in the early eighteenth century. Before this, their relative position is best shown by how the EIC helped the Iranians capture Hurmuz from the Portuguese. They got little credit or advantage from this.

In India there developed a standoff, but a different one from that which had confronted the Portuguese. It will be remembered that the Portuguese had power at sea, but very little on land, as they themselves well knew. In the case of the Dutch and English companies, they could not exercise the control over trade in, say, the Gulf of Cambay which the Portuguese had achieved, and more importantly they soon placed factories not only on the coast in the port cities but also inland at production centres. This made them very vulnerable indeed. Consequently, while the companies could, and did, seize Indian ships, including those belonging to the political elite, at sea, the Mughals retaliated by seizing European factors in the ports and inland. A stalemate resulted, which was broken only when Mughal power declined in the eighteenth century. One consequence of this, a fateful one, was that the English were able to take advantage of this to secure important concessions

for themselves. In 1719 they paid money and were given freedom from internal customs duties in the Mughal empire. This gave them, at first potentially and later actually, an enormous advantage vis-à-vis their Indian competitors.

The response from the port city controllers was obviously different. As we noted, the Dutch took over many of those which the Portuguese had seized a century earlier. The independent ones, such as on the Coromandel coast, welcomed the northern Europeans as a counter to the Portuguese. Both here and on the west coast however the Europeans also set up their own ports, of which Chennai and Mumbai are the obvious examples. As European trade in the ocean increased, these ports flourished and slowly took over the trade of their contiguous Indian competitors.

This also happened in southeast Asia. Several of the controllers of port polities tried hard to compete. This often meant an increase in state control of the economy. Aceh engaged in state-directed pepper production, using slave labour, and also eliminated some pepper areas in order to deny them to the Dutch. The ruler of Banten forced the inhabitants to grow a certain number of vines, and in Makassar the ruler supervised trade, while in Ayutthaya much overseas trade was a royal monopoly. These efforts were in vain. Dutch effectiveness meant that from the mid seventeenth century many previously flourishing Malay ports were outcompeted. 59

There was however another dimension to the work of the northern Europeans in the Indian Ocean. Both the English and Dutch companies traded extensively with Europe, and replaced the Portuguese in this sector. Here, then, we are writing a history *in* the ocean. Om Prakash has written the standard account of this.60 The first period, to about 1680, finds the VOC dominant. He stresses the success of their official engagement in the country trade. Its establishment in mid-century was crucial for Dutch success, and it was based on their continuing access to Japan, and their control of fine spices. Thus while the English by the end of this period were catching up in their share of the trade with Europe, the total Dutch trade was still far superior because of their huge inter-Asian trade. The second period goes from 1680 to 1740. During this time the VOC was successfully challenged by the EIC, and to an extent by other European companies. The

decisive factor in this period was a vast increase in the European demand for fine cottons and raw silk. The English, by now well established in India, were able to take advantage of this, especially from their factories in Bengal. In the final period, to 1800, the English went ahead by leaps and bounds, though importantly Prakash stresses that the VOC did not really decline: rather it failed to match the rapid English expansion. We now see tea, a new product, entering the trade, again as a result of changes in European demand and English government policy, and a vast increase in the trade in opium, mostly to Indonesia and later to China. The China trade came to dominate. Imports to Guangzhou doubled and then trebled in the last quarter of the century, thanks especially to a vast rise in English tea consumption once import duties were reduced in 1784.

The main difference between these two companies was in their attitude to trade within Asia, that is a history *of* the ocean. The Dutch East India Company engaged massively in the 'country' trade, and did very well indeed from it. The great Dutch governor J.P. Coen well described the complexity of the trade which the Dutch East India Company hoped to enter:

Piece goods from Gujarat we can barter for pepper and gold on the coast of Sumatra, rials [silver currency] and cottons from the [Coromandel] coast for pepper in Bantam, sandalwood, pepper and rials we can barter for Chinese goods and Chinese gold; we can extract silver from Japan with Chinese goods, piece goods from the Coromandel coast in exchange for spices, other goods and rials, rials from Arabia for spices and various other trifles – one thing leads to the other. 61

Private trade by its employees was actively discouraged, another sign of the rigidity which seems to characterise their total presence. The company opened up some new and long-distance routes, and were able to compete successfully with Asian traders. One of their main successes was a result of their being the only Europeans allowed to trade in Japan from the 1640s: their profits here were immense. In another niche they had an unusual success. The Maldives produced the best, because smallest, cowry shells, which we have noted being very widely used as an alternative currency (see pages 84–5). The VOC was able to centralise this trade on Sri Lanka. In 1763 fourteen ships came from the Maldives carrying 80,000 kgs of these shells, a total of 85,740,000 shells.62

Meanwhile, the English company concentrated on the trade to Europe, and allowed its own servants, called factors, to engage in local trade on their own behalf. Private English trade in the Indian Ocean had expanded greatly by the end of the seventeenth century, and even more during the eighteenth, especially once the swing to the east and China became apparent in the last quarter of the century. Many EIC ships, carrying both company and private goods, spent their lives chaffering around the littoral of the Indian Ocean, engaging in what was in many respects a peddling trade.

Despite this large and often successful engagement in the country trade, the Europeans still had to send out large quantities of bullion to the Indian Ocean area; few European products found a market in the area. As Furber noted, 'if silver had not been available to the Europeans in sufficient quantities, the East India trade could not have been carried on.'63 This in turn reinforces our view of a world beginning to be integrated, for the bullion came from south America, and much of it flowed on to the Indian Ocean, either via the Mediterranean and the Middle East and so to our ocean, or around the Cape in European ships. On average two-thirds of VOC exports from Europe were in bullion; in the seventeenth century Peruvian silver, in the eighteenth Brazilian gold. Between 1660 and 1720 Dutch imports into Bengal, one of their major trading areas, were only 12.5 per cent goods, the rest being bullion. So also with the EIC. Over the period 1660–1720 only 20.6 per cent of English imports to all of Asia were made up of goods: the rest was bullion.64

Most rulers at this time, whether English kings or Mughal emperors, were bullionists who believed, with prevailing economic thought, that a rich state was one which had huge stocks of precious metals. Despite this, the influence of both of the companies in domestic politics, and their contribution to home revenues, was so great that they were allowed to export huge amounts of bullion. It must be stressed how fortuitous this all was. The consequences of the discovery of the Americas, and then of huge silver deposits there, generated the bullion without which Europeans could hardly have entered Indian Ocean trade. The ramifications of this are clearly enormous.

There was also a fluctuating, and ultimately unsuccessful, French effort in the ocean. The French seem never to have quite got it right. Several companies, usually undercapitalised, and often created *de novo* by the state as compared with the Dutch and English examples where the state recognised merchant pressure, had difficulty in competing with their European rivals. Often the French arrived too late, to find a trade, or a port city, already dominated by someone else. They did however attempt to plant colonies in Madagascar in the 1640s, and on the Ile de Bourbon (Réunion) in 1670. In 1710 they moved from there to Mauritius, now renamed the Ile de France. This island had been sighted by the Portuguese. In 1598 the Dutch named it and claimed it, but even in 1617 it was still uninhabited. Later the island was meant to serve as a way station between their other important territory, the Cape Colony, established in the 1640s, and Indonesia. They even tried to colonise it, but their settlements there failed, and they withdrew in 1710, having taken all the ebony and made the dodo extinct. Both these islands were captured by the British in 1810 during the Napoleonic Wars. The British at this time also acquired Rodrigues, which the French had settled in 1750, and the Seychelles, colonised in 1770.

The French were one of the European groups engaged in the slave trade in the Indian Ocean. This trade had a long history, and we have noted extensive trade from East Africa to the Middle East over many centuries. In the seventeenth century there was little demand for slaves in India, but there was a lot in southeast Asia, where various forms of bondage, right through to slavery, were common. This was especially so in Aceh, where expanding pepper plantations and tin mines needed slaves, as also did agriculture to feed a growing population. The Dutch entered this trade with some enthusiasm, doing especially well in buying people when there was famine in India. In famine years in Coromandel the Dutch shipped a thousand or so each year to Indonesia. The Dutch also took labour from Madagascar to work in their Cape colony, and even took some to the Americas. Later in the century the EIC took some hundreds of slaves from Africa, and especially from Madagascar, to Benkulen in Sumatra.

The French participated in this trade in the western part of the ocean. Indeed, the trade only became important when the French developed plantation agriculture, especially sugar, in the Mascarenhas islands. Again

Madagascar was the first place to supply slaves, but later the East African coast was also exploited.

Europeans in the Indian Ocean were making important advances as the eighteenth century progressed. Even by 1750 the VOC and EIC were handling nearly 40 per cent of Bengal's silk exports, and this was a major export from the area. 66 In global terms, Steensgaard worked out figures which show how important the Europeans were becoming. He claims that the total Indian overseas trade around 1600 was about 60,000 tons. The VOC alone by the 1620s had 10,000 tons, and around 1700 had 30,000 tons. By the middle of the eighteenth century European demand for Indian Ocean products was probably bigger than the total internal trade in the ocean, though this takes no account of inland markets. 67

Our schema concerning the degree of influence of port cities claims that the third stage is when a controller of a port city not only interferes in production, but actually seizes the land on which production was occurring. The Dutch did this early on in the Malukus, but this was atypical for the time. It was only when the British acquired revenue rights in Bengal in the 1760s that a seismic change occurred. Their political power was used ruthlessly to the advantage of the EIC and more particularly the English private traders. For the first time producers could be coerced, and new trade networks created. English private traders in Kolkata and Mumbai came to dominate the trade of the Indian Ocean and the South China sea, and the EIC rose to superiority in trade to Europe. Bullion for goods no longer applied, for the English could finance purchases in Bengal from land revenue collections, and could also borrow money from private European merchants in Bengal against bills of exchange payable in Europe.

Ashin Das Gupta linked the beginning of European dominance with Asian decline, and this he explained was caused by the decline of the great Islamic empires. He sees an important transition. Once European ships had carried Asian traders, and Asian goods, to Asian markets, European ships being preferred increasingly as they were less likely to be attacked by pirates. Now, in the eighteenth century, European ships carried European goods to European controlled ports. He also described how Europeans began to move inland. At first they merely protected their inland trade with small

bodies of troops, but this soon moved on to interfering in actual supply. By mid century Surat's trade had been taken over by Mumbai; as Das Gupta put it, 'there can be no doubt that by the turn of the nineteenth century not only was the European ship dominant in the ocean but the Indian ship has sailed into oblivion.'68 But this story will be taken up again in the next chapter.

Involvement in the country trade got Europeans closer to Indian Ocean patterns and rhythms. They fitted in, acculturated, in the milieu. We described how there developed a tacit understanding between Gujarati merchants and the Portuguese officials in Diu. So also in East Africa, where below the official pronouncements there was a whole other layer which was to do with cooperation, acculturation and dependence. This was even to be seen in relations with Muslims, in theory so hated and seen to be so threatening. Especially in the early days the Portuguese relied heavily on existing Muslim trade networks in the south to get their goods. To ensure their cooperation the Portuguese treated them well, gave them presents, and tried to work with them on matters such as choosing a new sultan for those ports in the south where puppet sultans ruled.

Other examples of very human interaction are numerous, best seen perhaps in copious intermarriage or at least interbreeding, and in the practice of Christianity, or for that matter Islam, in the area. Boxer described an 'amicable mixture of Christian, Muslim and pagan practices', and these syncretic practices were followed not only by newly converted Bantus but by whites, mulattos and Goans as well, despite the opposition of the clergy. Such happy mixing and intermingling was also found at Sena in 1633, where the church school was attended by the children of Portuguese, and also people of Chinese, Javanese, Malabari, Sinhalese, and various African backgrounds, in a way reminiscent of the College of St Paul in Goa.

This sort of low level intermixing was seen in a variety of other contexts. In 1606 Padre Gaspar de San Bernadino arrived at Siyu. There were no Portuguese, or indeed Christians, in the area so the status of priest was unknown to the locals. However, two Hindu merchants from Diu did know what they were. They spoke good Portuguese and acted as interpreters for the Fathers and told the local king all about how Christian fathers behave. At Takwa, on Manda Island, is a blue and white sixteenth-century

Portuguese dish set into the base of the cistern beside the mosque, that is the ablution trough.

There have been many studies of the Portuguese all over the Indian Ocean area 'going native', assimilating to the intricate long-standing networks of trade, especially in the Bay of Bengal area and many parts of southeast Asia. These people operated outside official Portuguese channels, spoke various Asian languages, and indeed very seldom had the opportunity to be counselled by a priest. They were in a position no different from, say, Armenians, Jews, Shirazis, Turks, and the host of other people trading and living and marrying in this polyglot and heterogeneous maritime world.

Most Portuguese outside the official structure were men who had served in the forts, and then by getting married had become casados ('householders'). Many of these people found better trading opportunities outside the forts and strips of the coast controlled by the state. They went to other areas and traded alongside all the others found there, whether Swahili, other Muslims, or Indian Hindus. Many of these people can be seen as transfrontierfolk, the appropriate term for people who do not straddle a frontier, but rather move right over to the other side and acculturate more or less fully. These men were to be found all over littoral Asia, up and down the Swahili coast, in Cambay, all around the Bay of Bengal.

The same interaction can be seen in the 'search for the similar' which the early Portuguese did both in East Africa and in India. 70 In both cases they tried desperately to come to terms with, even appropriate, unknown people and religions, and understand them in terms familiar to themselves. In both cases what happened was that they met Hindus, followers of a religion at that time unknown to nearly all Europeans, and thought their religion was a form of Christianity. They were also predisposed to find Christians because they hoped to find Prester John, the Christian emperor who would ally with them and smite the Muslims from the south.

In a more social area, it is clear that many Portuguese in India acculturated and fitted in to the Indian Ocean littoral environment. Portuguese doctors, including even Garcia da Orta, recognised that often Indian remedies were better than European ones. Some aspects of pollution were picked up from Hindu practice. There was copious sexual interaction, and hence

reproduction, between Portuguese men and Asian and African women. The result was the creation of a very large mestiço population. Even in their capital city of Goa the Portuguese were far outnumbered by Indians: the total population in 1600 was about 75,000, of whom 1,500 were Portuguese or mestiços, 20,000 Hindus and the rest local Christians.

The medical intermingling can stand as a type for this whole topic.71 Until the sixteenth century medical knowledge and practice in Europe, in the Muslim world and in India seems to have been relatively evenly spread. No area had any decisive advantage, although in different specialities different areas were ahead. There was a considerable degree of interaction between the traditional systems of these three areas. Yet there also was a recognition that some illnesses were geographically specific; some Indian illnesses, for example, were seen by foreigners as 'different', and best treated by indigenous methods. This was especially to be seen in the first European city in Asia, the Portuguese capital of Goa.

One example of both difference and interaction was bleeding. Bleeding was almost a universal cure, prophylactic and restorative in European medicine. They continued to rely on this when they got to India. In January 1542 Francis Xavier, later to be a saint, was ill. He ended a letter by writing, 'I would very much like to write at greater length, but sickness does not now permit it. I have been bled seven times today, and I am only passing well.'72 In the 1670s the Abbé Carré fell ill with a fever, and insisted on being bled. Great quantities were hacked out of him by enthusiastic amateur bleeders, and

This made me so feeble that I cannot bear to speak of it. Yet, though I felt very weak, I was not surprised that the fever grew less, as it no longer had the cause [that is, excess of blood] which had kept it up; and I further reduced it by refusing for eight days to eat many little delicacies that I would have liked – sometimes one thing, sometimes another, though I must confess I refrained with very great difficulty. For eight or ten days I still had my sight, my memory, and my senses, but so feebly that I did not remember anything that happened to me.

In the Royal Hospital of Goa bleeding was widely prescribed, being done up to thirty or forty times, so long as 'bad' blood came. Here we can see interaction, as Tavernier tells us: I forgot to make a remark upon the frequent bleedings in reference to Europeans — namely, that in order to recover their colour and get themselves in perfect health, it is prescribed for them to drink for twelve days three glasses of pissat de vache [cow's urine], one in the morning, one at midday, and one in the evening; but, as this drink cannot but be very disagreeable, the convalescent swallows as little of it as possible, however much he may desire to recover his health. This remedy has been learnt from the idolaters [that is, Hindus] of the country, and whether the convalescent makes use of it or not, he is not allowed to leave the hospital till the twelve days have expired during which he is supposed to partake of this drink.

This mingling presumably explains why long after Portuguese political power had declined their language remained a lingua franca in maritime Asia. When the Dutch conquered Sri Lanka they were forced to use Portuguese to communicate with their new subjects. At the battle of Plassy in 1757 Clive used Portuguese to communicate with his troops. So also at the Cape, where in 1765 Mrs Kindersley wrote vigorously that the slaves of the Dutch were

brought originally from different parts of the East Indies. What seems extraordinary is, that they do not learn to talk Dutch, but the Dutch people learn their dialect, which is called Portuguese; and is a corruption of that language, some of them are called Malays or Malaynese, brought from that country of Malacca, and the islands to the eastward of India, subject to the Dutch company.

She found the same in India. She wrote of Indian Christians, whom she considered to be very low people, 'Their language is called *Pariar* Portuguese, a vile mixture of almost every European language with some of the Indian. This is however a useful dialect to travellers in many parts of Hindostan, particularly on the sea coast, and is called the *lingua Franca* of India.'73

Yet we must not exaggerate the extent of interaction, let alone of tolerance. Portugal's official policies were brutal and ethnocentric. Yes, there was mingling on the ground, yet there also was racism. Portuguese colonial society was very strictly graduated. At the top were those born in Portugal and who had no hint of Jewish blood. The newly converted Jews, New Christians, were regarded with very considerable suspicion. The great savant Garcia da Orta was posthumously convicted of Judaising. His bones were dug up and burnt. His sister was burnt alive. Next in the hierarchy

were *casticos*, people born in India of Portuguese parents. There were very few of these, as few Portuguese women came to the east. These people in any case were considered to be inferior to those born in Portugal, because their wet nurses were Indian and hence they had drunk 'contaminated' milk. Next was the large mestiço, mixed blood, population, who were subject to many slurs and disadvantages. In nearly every case the father was Portuguese, the mother Asian. Those of mixed African and Portuguese descent were lower again. Then came Indian Christians, then non-Christians, and at the bottom black slaves. Goa had a considerable slave population. They were used in domestic work, and sometimes were hired out by their owners to work as seamstresses, nurse maids, or prostitutes. Often they were treated very brutally indeed. Their value can be seen in the fact that the dearest slave in the Goa market would be a young woman who could cook, sing, sew, and was a virgin. She would sell for 30 cruzados, a fine Arabian horse for over 500.

The Protestant Dutch and English also mingled and interacted. Often they learnt from Asian and African experience. After the VOC took over Mauritius they tried to introduce European-style agriculture, and failed. However, their slaves came from Madagascar, which shares with Mauritius many characteristics of soil and vegetation. The Dutch learnt more appropriate farming techniques from their Malagasy slaves. Similarly in Madagascar, where the French were forced to learn how to cultivate from local people.

Despite this, there was still very considerable racism in the Dutch and English settlements. Indians in most of them were forced to live in 'black towns', apart from the European rulers. The Dutch in Jakarta were greatly outnumbered. In 1673 the city had over 2,000 Dutch and 726 Eurasians, but nearly 3,000 Chinese, over 5,000 'black Portuguese', about 3,000 local people of Malay background, and a massive 13,278 slaves. These were mostly for domestic work, and for show, but some were used by Chinese owners as plantation labour.

Divisions in Jakarta were roughly similar to those in Goa. The population figures we have just quoted show a strict division according to race, and the VOC also laid down rigorous sumptuary laws, which regulated who could

wear a hat, or carry a parasol. Only the governor was allowed to have a coach with six horses.

Who was really the important group in this Indian Ocean littoral port polity? It has been claimed that a particular group was essential to the running of the town. Blussé writes that women, hardly any of them Dutch, were the vital support for the functioning of the city, hence he describes them as caryatids. Equally important was a racial group, the Chinese. Just as local and Gujarati Hindus played a dominating role in the Goan economy, so also did the Chinese in Jakarta. Their work in feeding the town, and generally running the local economy, was essential. Despite this, there were massacres and expulsions from time to time, yet they always returned. These massacres were a part of the brutal, 'life is short' nature of Jakarta. Like Goa, the European city often felt threatened from within and without, so that society was rather like the classic frontier society well known in several newly established settlement societies in the Americas and elsewhere. Brawls and street fights were common, executions of the guilty were appallingly savage affairs, and people were publicly whipped not just for political offences but also for moral or social deviations from the strict Calvinist norm.74

Short life expectancy also fostered this 'frontier' mentality, full of tension and with a lack of concern for life. Mortality in Jakarta was very high, and often Dutch ideas exacerbated the situation. They believed that disease was carried in the air, so windows were kept shut and the occupants roasted. They insisted on wearing European clothes and eating European food, neither appropriate to a city located nearly on the equator. Jakarta was located on several small rivers, but to make it more like Amsterdam they dug canals, and these became sewers which spread diseases very efficiently. While Goa also suffered from water-borne diseases, in many areas the Portuguese seem to have acculturated much better than the Dutch.

The English company was prepared to tolerate private trade undertaken by its employees, and indeed this was one of the reasons for English success in the eighteenth century. Among the Dutch, after an early experiment with allowing some private trade by VOC employees, the company decided to rigorously enforce its monopoly. No company servant, at least in theory,

was allowed any private trade. Only those who had left company employment could do this. This meant that many fewer Dutch men went native and, as we noted of the Portuguese, took part in the warp and weft of Asian trade. Some however did, such as one who was found having a splendid time on an island in the Malukus 'with as many women as he pleaseth... he will sing and dance all day long, near stark-naked... and will be drunk for days together.'75

We have then a mix of prejudice and interaction, or antipathy and interbreeding. The Persian envoy Sulaiman reminds us of something else, namely that cross-cultural understanding was hard to achieve. We described how the first Africans and Asians to see Europeans found them to be bizarre creatures indeed, yet so did Sulaiman nearly two hundred years later. In Chennai, once he had got ashore, he was taken to an English party which was held to celebrate the coronation of James II in 1685. He found the whole experience extremely curious. The English did not take off their shoes, they sat on chairs rather than carpets, they had their dogs with them, and there were women present. This bit at least he liked:

Surely such women must be encouraged. Their beautiful straight backs sway like cypress trees and bring a rush of sap into the dry garden of the old lover's hearts. The rose-red glimmer of their cheeks, cheeks like those of heaven's Houris, sparked new life in the breasts of the company of friends. Thus the light of their beauty was admitted and they participated in the festivities despite the fact that they were women.

As the party got going,

the mart of hugs and kisses began to warm up. Everywhere slim-waisted women were being embraced while faces grew red with the rose-coloured wine. The festivity reached such an intensity the veils of modest restraint were on the verge of bursting into flame and burning away. It is another of their fixed rules that the degree of friendship one has for a person is expressed by the amount of affection one shows that person's wife. . . . when a [dance] turn was well done they plucked throat-burning kisses from one another's honeyed lips. 76

This discussion of interaction leads us easily into a discussion of continuing structures in the Indian Ocean from 1500 to 1750. We have provided copious data already to show a minimal European impact in many areas: in

the next chapter we reverse the focus and look from within the ocean rather than focusing on the activities of Europeans, their successes and failures.

Chapter 6

The early modern Indian Ocean world

These Europeans, the estado, the companies, and the private traders, operated in a complex and confusing commercial milieu, one with which they often had trouble coming to terms. The intricate patterns of Indian Ocean trade required much study and accumulation of knowledge. In 1703 in Surat a Dutch merchant warned his superiors that the bazaar market was risky indeed, for

the bazaar [market] prices are diverse, for they differ not only from day to day, but from hour to hour. Also they differ as to the merchant with whom one is dealing for one has here – as in other places – large dealers, maritime traders, small merchants, shopkeepers and many different kinds of hawkers. One merchant is able to sell one pound [about half a kilogram] or less, another one maund [one maund is about 35 Dutch pounds], the third ten and the fourth 100 and so unto 1000 and 100,000. So one can well imagine the differences in bazaar prices if they have to fetch a profit from one trader to the next.1

We quoted the important VOC governor Coen on the country trade, which he hoped his company could enter (see pages 150–1). Things were much the same even later in the eighteenth century: there was still a complex kaleidoscopic world of trade for the Europeans to try and enter. James Forbes wrote of Mumbai in the 1770s how

Bussorah, Muscat, Ormus, and other ports in the Persian Gulph, furnished [Mumbai's] merchants with pearls, raw silk, Carmenia wool, dates, dried fruits, rose water, attar of roses, coffee, gold, drugs and honey. A number of ships annually freighted with cotton and bullion to China, returned laden with tea, sugar, porcelains, wrought silks, nankeens, and a variety of useful and ornamental articles. From Java, Malacca, Sumatra, and the eastern islands, they brought spices, ambergris, perfumes, arrack, and sugar: the cargoes from Madagascar, the Comorro isles, Mozambique, and other ports on the eastern coast of Africa, consisted chiefly of ivory, slaves and drugs: while the different parts of India produced cotton, silk,

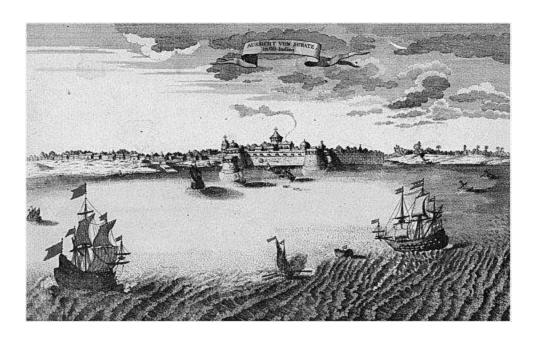


Figure 3 Surat in East-India. Produced by Raspischen (Publishers), c. 1836. © National Maritime Museum, London

muslin, pearls, diamonds, and every precious gem; together with ivory, sandal-wood, pepper, cassia, cinnamon, and other luxuries. This valuable commerce was carried on by vessels belonging to the European or native merchants settled in Bombay; totally independent and unconnected with the trade of the East India Company.2

The great port cities reflected this variety, being still home to a vast array of merchants from many parts of the world. The Jesuit Manuel Godinho was in Surat in 1663, and found

over a hundred thousand: white Mughals, Indian Muslims, all types of pagans, Christians of various nationalities and, in fact, people from all over the world who have either settled in Surat or have come to the port on business. In Surat we find Spaniards, Frenchmen, Germans, English, Dutch, Flemish, Dunkirkians, Italians, Hungarians, Poles, Swedes, Turks, Arabs, Persians, Tartars, Georgians, Scythians, Chinese, Malabaris, Bengalis, Sinhalese, Armenians and an endless variety of other strange barbarian people.

As for its trade,

Foreign vessels visiting the port are countless. At any time of the year one may find in Surat ships bound for China, Malacca, Achin, Macassar, Moluccas, Djakarta, Maldives, Bengal, Tenassserim, Ceylon, Cochin, Cannanore, Calicut, Mecca, Aden, Suez, Mogadishu, Kishm, Muscat, Madagascar, Hormuz, Basra, Sind, England, and so on, to any place one may think of. 3

We can now turn to a description of continuing structures of trade in the Indian Ocean. Lancaster, on the first English expedition to the east in 1591–92, moved from one economic world to another as he proceeded up the East African coast, just as had Gama a century earlier. In the extreme south he commented on 'certaine blacke salvages, very brutish'. The English bought an ox for two knives, a heifer for one knife, and some for even less. Then they got to Great Comoro and a more familiar and sophisticated world. 'Their king came aboord our ship in a gowne of crimosine [crimson] satin, pinked after the Moorish fashion downe to the knee; whom we entertained in the best manner, and had some conference with him of the state of the place and marchandises.'4

'Asians' also were well aware of differences, in ways which make clear there is no such thing as an 'Asian' at this time, or indeed any other time. The Persian ambassador Sulaiman was intrigued by some islands in the Bay of Bengal:

One of the many strange islands which we passed on our voyage [from Siam back home to Persia] was the island of Andaman. This island is flourishing and extremely green and here lives a group of cannibals who have long teeth like dogs. The teeth of these savages are so long that they project from their mouth, but otherwise their bodies are like human beings. As for their dress, they are content to wear nothing more than the leaves of trees to cover their loins. If anyone has the misfortune of falling into their hands, they carry off the poor man and eagerly devour him. For this reason people do not visit Andaman and not many details are known about the island or the inhabitants.

At a different level, he was less than impressed with the veneration paid in Sri Lanka to the relic of the Tooth of the Buddha. 'The king of Ceylon and all the Indians living on the island believe in this nonsense and are fervently engaged in idolatry.'5

These are perhaps differences of civilisation, but then we also cannot lump together all Muslims: they were a diverse lot, and even within this broad category they were far from controlling all trade in the Indian Ocean at this time. Hindus from different parts of India, Buddhists from mainland southeast Asia, Armenians, Jews, Christians all shared in the trade. Within the Muslim 'community' there was considerable dubiety expressed by those from the heartland of the Middle East to those on the edges, as in the Malay world, or even in Gujarat. The great navigator Ibn Majid wrote of his

ostensible co-religionists in the Malay world that 'They are evil people who follow no rules; the unbeliever marries the Muslim, and the Muslim the infidel woman... they publicly drink wine, and they do not pray before setting out on a voyage.' An unsuccessful Ottoman grandee in 1538 said that the local Gujarati Muslims were very slack: 'at the time of prayer they simply play music; most of them are infidels'. 7

To list all the items traded would be a tedious task indeed. We will, rather, concentrate on changes over this period. In all this we need to remember Rene Barendse's advice and take care not to see all change as stemming from the European presence. In very general terms from about 1300 to 1750 long-distance trade was roughly oriented north to south, that is India and China trading manufactured, high value added, goods to the south – East Africa, southeast Asia – from whence came tropical raw materials like slaves, ivory and some gold.

The vast bulk of the trade continued to be in humble products, and usually was left alone by the company level of the European presence: rather it was controlled by local traders, amongst whom were some Europeans. A French account from the 1730s mentions a trade in sugar from Bengal to Surat, taken as ballast and then sent up country, and some also re-exported to Persia and the Red Sea. On the Bengal–Melaka–Surat route opium went out, and sugar and calin came back. Bengal provided rice to both the Coromandel and Malabar coasts, while rice, ginger, coarse piece goods and sugar went direct from Bengal to Mocha in the Red Sea, and sugar and coarse cloth to Basra. Most of the port cities not only had a trade in goods which were to be re-exported either overseas or inland, they also imported most of their raw materials and necessities. Hurmuz was an example, albeit an extreme one. It got rice from Chaul and other ports on the Indian west coast, grain from the Punjab via Sind and also from the Persian mainland. Rope, iron and coconuts came from Malabar, wood from East Africa, especially from the Somali coast via the Hadhramaut, and also from Socotra. By this time much of this humble trade was being done in private European ships carrying native cargoes. Below this was an even more humble level, with minor merchants in tiny local vessels chaffering their way up and down the coasts and in the archipelago.

Some of these products came from far inland, or went far inland from the port city nodes. We maritime historians need to remember that the trade by sea was in products which came from the land, and were consumed on the land; the sea trade then is not a thing alone and of itself, it existed to service people who lived on the land, and not necessarily on land located on the coast. As an example, Bandar Abbas in the Gulf was the centre or 'scale' of a vast and variegated number of routes, some maritime linking distant forelands, others by land linking very diverse and often distant hinterlands. From Bandar Abbas caravan routes went off to Kirman and Isfahan, to Mashad, Bukhara and Khiva, and from Yazd to Balkh and to Qandahar, Tabriz, and even on to the Caucuses.9

Other products were legion. We have discussed the spice trade in some detail, but there were trades in other high-value goods too. One example is pearls, which came from both the Gulf around Bahrain, and from the Gulf of Mannar between Sri Lanka and India. These were traded and valued far and wide. According to Sulaiman, our Persian ambassador – though he was hardly a neutral observer – those from Bahrain were far superior to those from Mannar. 'Unfortunately all other pearls when confronted with the pearl of Bahrain lose their bright countenance out of shame and grief. The jeweller of Time and Chance has relegated these Indian jewels of lesser lustre to a low shelf in the bazaar of happiness.'10

Another preciosity was the trade in a very large and valuable beast, that is the elephant, which were shipped over surprisingly long distances, though not as far as the rhinoceros which the Portuguese brought from India all the way to Lisbon, and then to Italy, where it died before it could be presented to the Pope. The sultan of Golconda had several large ships to bring elephants from Arakan, Tenasserim and Ceylon. Each could carry '14 to 26 of these Vast Creatures. They must of Necessitie be of Very Considerable burthens and built exceedinge Stronge.' A huge supply of plantains was carried to feed the beasts on the voyage. They could be an unruly cargo:

A great Ship of 5 or 600 tunns burthen that belonged to a great Merchant, an Eminent man in Bengala, whose name was Narsam Cawn [Nasib Khan], In her Voyadge homeward from Cehlone, One of theire Elephants not well Secured, did, with all the force he could possibly, run his tooth through the Ship Side in such a measure that they could not keep her free 2 hours longer, and were

forced to betake themselves to their great boat, and haveinge faire Weather and not beinge above 30 leags off Shore, they all Saved theire lives.

If the elephant survived the voyage and lived for three days once landed the freight was payable: between Rs 500 and 800, depending on size. 11

A brief regional survey around the littoral of the ocean will identify the main trade products. The East African coast at this time continued mostly humble trade, except in ivory, to the Red Sea and Hadhramaut areas. Most of this trade, of which at least by volume the main item was mangrove poles used for house construction and ship building around the Arabian coasts, was carried by Muslim traders located in the host areas rather than by the Swahili inhabitants of the coast.

The Red Sea continued to be the major route connecting the southern part of Eurasia with the northern, that is the eastern Mediterranean. Some of this trade was that done by pilgrims as they chaffered their way to the Holy Cities, engaging in petty trade on the way in order to cover their costs and buy food. But apart from this there was a very major trade centred on the port of Mecca, Jiddah, which however had little or nothing to do with the pilgrimage traffic. Around 1580 some forty or fifty great ships called each year with spices and merchandise. A few years later Lobo wrote generally of Jiddah,

which has been made so famous in these times in all of the East by the great number of ships that go there and the rich trade the merchants find there, and the superstitious custom of pilgrimages to Mecca made by those who follow the infamous Koran... since the ships which sailed to Juda made excellent business profits, because of the great wealth of the universal market of people and merchandise carried on in that city, they became so famous in India that when people wanted to indicate that something was very costly and valuable they would call it a ship from Mecca or Juda. 12

Throughout our period Gujarat was a major trade centre, based on its huge production of cotton cloth and other products, and its role as a gateway not only for the hajj but also for a host of imported products sent up country to the heartland of the Mughal empire. Early in the sixteenth century Tomé Pires wrote that Cambay stretched out two arms, one to the Red Sea and one to Melaka. Portuguese misrule made the Gujaratis move out of the latter, thus assisting in the decline of this once great port city. They traded

instead all around the Bay of Bengal, and in the Malay world, especially in Aceh. The companies found them keen, often dominant, competitors in the region. By the seventeenth century Cambay had been replaced by Surat. This was an important change and one which had nothing to do with the European presence in the area. Through the seventeenth century and beyond Surat was one of the greatest ports in the world, with a variegated and skilful merchant community, vast capital resources, and connections all around the littoral of the ocean. Around 1700 the port was home to a fleet of over 100 vessels, mostly medium size ones of 200 or 300 tons, so that the total tonnage available was at least 20,000 dead weight tons. The total value of trade was at least Rs 16 million, and only about Rs 1.5 million of this was European-owned. 13

Much local trade in Malabar, especially that in pepper, was disrupted by the Europeans, first the Portuguese and from the 1660s the Dutch. The Coromandel coast was less affected. In the mid seventeenth century the ports of the sultanate of Golconda, especially Masulipatnam, traded extensively around the Bay of Bengal. A dominant figure at this time was the Persian grandee cum trader Mir Jumla, who in the 1640s had his own ships (though carrying cargoes belonging to many people) travelling all over the ocean: to Bengal, Surat, Arakan, Ayuthya, Aceh, Melaka, Johore, Bantam, Makassar, Ceylon, Bandar Abbas, Mocha and the Maldives. While traders from Coromandel ports traded all around the Bay of Bengal, to Burma and Arakan and Pegu for example, one of their best routes had been to exchange local cloths for spices. As the Dutch monopoly became relatively effective this trade declined, but Coromandel merchants were able to disperse, just like the Gujaratis, and trade in places less closely controlled by the VOC. An example is Banten, where south Indian merchants had a very large, even dominating, role.

Traders from north of the Malay world, that is China, also had a role in this region. We pointed out in the previous chapter that an extensive Chinese trade even to the western ocean had ended by the middle of the fifteenth century. However, the Chinese continued to come as far as Melaka, and indeed some still traded there even after the Portuguese conquest in 1511. In the seventeenth century there was a large Chinese settler, and trader, population in Jakarta (Batavia) and its umland. However, China's main

trade at this time was with Japan, from whence were brought vast quantities of silver. In the middle of the century the Japanese expelled all European traders, allowing only the Dutch a very restricted presence. Chinese traders from Fukien were not affected by this, and they did well, much better than the Dutch, in the overseas trade of Japan. It could be that the dynastic change in China in the middle of the seventeenth century affected foreign trade as a whole for a time, but if it did this was only temporary.

Who were the main merchants at this time? There was a huge range, from the smallest pedlar to magnates who controlled vast amounts of capital. At one end are the humble folk, local to the area, who traded short distances up and down the coast, say from one Indonesian island to another, or from Bengal to Masulipatnam, or Mombasa to Mogadishu; indeed even these would be considered major voyages for some of these men. Other humble men were able to travel much further, taking their bundle of goods on board a ship owned by some other bigger person: maybe a large merchant, or a political leader, or a European. People could travel for years, making a little profit here, a loss there.

Above such atomised people, about whom admittedly we know very little, we can see a category who are part of a much more articulated merchant world. The Armenians are an excellent example. Ethnicity, kinship and religion were vital in trading matters. The much quoted account of the Armenian merchant Hovhannes has provided us with a typical case. He was by no means a pedlar, but rather was an agent of larger Armenian merchants in the Armenian suburb of New Julfa in Isfahan, in Iran, and later Agra, in India. However, his importance for us is that he operated as a member of a very dispersed community. His journal describes his travels over the period 1682 to 1693. During this time he visited and traded in Bandar Abbas and Surat, and then in Agra, where he spent most of a year. From there he went to Tibet, then back to India, to Patna, and then Bengal. Everywhere he went he had contact with, and assistance from, other members of the far-flung

Armenian merchant community. Indeed he may well have had written advice on where to trade, and what to trade in, for a seventeenth century Armenian merchant's manual gave instructions for all the places Hovhannes visited. 4 Armenians were classic intermediaries in the commercial world.

It seems that persecution had done them a favour. They were moved by Shah Abbas from Armenia late in the sixteenth century, and made to settle in New Julfa, near Isfahan. This move gave them much better access to routes and products. They spoke Persian, and so could operate all over the Muslim world, yet were Christian, an advantage when dealing with Europeans. Thanks to their network made up of the dispersed Armenian community they had excellent intelligence on prices and conditions in their centre of New Julfa. There were several very large, often kin based, merchant houses in New Julfa, and these sent out agents, maybe a hundred in all from each house, far and wide around the Indian Ocean and far inland too. By the end of the seventeenth century Armenians in London were major freighters of the ships of the EIC. They traded as far as Sweden, and were important merchants in Amsterdam. 15 There are strong parallels here with the Jewish trade from Egypt which was so important in a previous period (see pages 103-4). Other major merchants belonged to larger and more settled communities. Such magnates have recently been described as 'portfolio capitalists', that is people who spread their investments into many areas, including banking and shipping as well as trade in a host of commodities. These merchant princes, many of them Muslim at this time, overlapped with rulers and nobles who also traded. None of these were humble men at all. The Europeans wrote in awe of the great Jain merchant Virji Vorah in Surat, reputedly the richest man in the world, and who could have bought and sold the northern European trading companies with ease. Virji Vorah, who died in 1665, was into everything. He was a banker, a ship owner, a trader in indigo, pepper and many other products. He engaged in both retail and wholesale trade, and lent money to the Mughal nobility. He also lent money to the Europeans, and used his power quite unscrupulously. He had a Coromandel counterpart, Kasi Veeranna. He operated all over the central Coromandel coast, and sent out ships to both mainland and island southeast Asia from Pulicat, Chennai, San Thome, Tranquebar and other places. He was a major supplier of local cotton cloths to the European companies, and it is symptomatic of changes occurring at this time that from the 1670s he left a rather unsettled local environment and based himself in Chennai, from where he administered tax farms over an extensive area of coastal Coromandel. 16

Most of these wealthy men did not travel themselves, but rather had agents spread around the great port cities of the littoral, and also far inland. Virji Vorah had agents or connections in Calicut, Agra, Burhanpur, all over the interior of Gujarat, and at all the great emporia around the Indian Ocean littoral. Networks of other Gujarati traders, especially the Hindu merchant group known as banias, extended even beyond this, to the Philippines, and even to Russia. These agents would often be members of the same community as themselves, often indeed related to some degree to the central figure.

Members of the chulia community on the Coromandel coast are roughly analogous to the banias of Gujarat. Bowrey wrote a very hostile, and revealing, account of them. We see yet again Indian Ocean merchants competing very well with Europeans in the late seventeenth century, for Bowrey was writing in the 1670s:

The Chulyars are a People that range into all Kingdoms and Countreys in Asia, and are a Subtle and Roguish people of the Mahometan Sect, but not very great Observers of many of his laws. Theire Native land is Upon the Southernmost parts of the Choromandell Coast. . . . They by theire rangeinge much (before they content themselves with a place for theire abode), doe learne to write and Speake Severall of the Eastern languages, whereby they very much delude the people, and not a little cheat them. They are likewise a very great hinderrance to us, for, wherever these rascalls be, wee cannot Sell any goods to a Native of the Countrey, but they creep in alonge with them, and tell them in private what our goods cost upon the Coast, or in Suratt, or Bengala, or elsewhere, which doth many Christians a great Prejudice. 17

Stephen Dale's exemplary account of Hindu merchants trading far and wide in Central Asia, Russia and the Middle East is another example, to be put with the Armenians, of how we are beginning to see greatly increased links across the whole globe. 18 It would be too grand to start writing of a 'world economy' yet, but certainly there were major new connections. The most important was not European passages around the Cape of Good Hope, but the bringing in of the Americas.

Indeed, it must be seen as a happy coincidence that the Americas were discovered, and bullion obtained, at the same time as the Cape route was opened, for without American bullion Europeans would have lacked the

funds with which to trade in Asia. And these bullion-fuelled Europeans in turn affected part of the Indian Ocean littoral: in the early eighteenth century the European demand for textiles from Bengal created an extra 100,000 jobs in the industry. This massive increase in the supply of bullion had some impact on the economies of the Indian Ocean. For example, it meant that ambitious rulers, especially in Mughal India, could now demand their taxation on the produce of the land, the land revenue, in cash rather than kind: hence the Indian countryside was monetised, and markets spread to many remote villages. There were even examples of inter-continental competition impacting deleteriously on Indian Ocean producers. In the seventeenth century indigo and sugar, both major cash crops in India and elsewhere, were undercut by cheaper similar products from the Americas. Later, cloves from Zanzibar were similarly undercut. Some merchant networks now spread even further than before: Portuguese trading in the Indian Ocean area had connections going all the way to the Americas, as did pirates.

Bullion was the prime example of a product flowing around the world. Even before the Americas much European-origin bullion ended up in the Indian Ocean region. However, much larger amounts flowed in once South America came on line. To sketch this trade is important for two reasons. First, it is an example of a major change in trade and the economies of the Indian Ocean area, but not, as Barendse wants us to remember, one that was caused solely by Europeans. Second, it is the prime manifestation of what could be depicted as the beginnings of an integrated world, and this aspect we will turn to in the next chapter.

Contrary to the received opinion, the majority of the flow of precious metals from Europe to the East for most of our period did not take place in European ships via the Cape, but rather in Asian, and some European, ships via the Levant. Other bullion was carried by the Spanish to Manila, and from there taken by Chinese traders to the great sink of China. However, we are only now beginning to take account of the vast production and exports of silver from Japan over the period 1560 to 1668, and even later, to China. Flynn summed up very tersely this whole matter when he wrote that 'Japan and Spain were major competitors in the world's first global market; China was the most important customer, followed by India.' 19 Indeed, the role of

Europeans has recently, and somewhat extravagantly, been described merely as that of 'intermediaries in the trade between the New World and China.'20 In short, contrary to a European-focused stress on the effects of American silver on Europe, three of the major aspects of world monetary flows in this early modern period have to do with Asia: the drain of much American bullion across the Pacific, or through Europe and so to Asia, often carried in Asian ships, and two major production areas apart from the Americas, that is gold from East Africa and silver from Japan.21

New crops have been listed in many places. However, a flow of new varieties from one place to another was not an innovation in the sixteenth century. Some products and styles that are today spread all around the ocean originated in the distant past in one particular area. The best example is bananas, which came from Indonesia with the migrants to Madagascar, and subsequently were much modified and improved in Africa. The areca nut, a mild stimulant which originated in southeast Asia, again is ubiquitous around the ocean. Ibn Battuta was offered some in Mogadishu as a gesture of respect for his learning. Newitt and Middleton provide quite long lists of products, techniques and crops imported into, and indigenised in, East Africa: cotton, rice, bananas, coconuts, mangoes, outrigger canoes, looms, square houses and the use of coral cement in construction. Sub-Saharan Africa over many centuries received from further east, via Hurmuz, the Hadhramaut, northern Ethiopia and then the Sudan, bananas, taro, pigs, goats, sheep, cattle, chickens.

Most plants which came from the Americas to Europe were transmitted by the Spanish, but Brazil sent to all of Africa, and to India and China, Indian corn, manioc, sweet potatoes, peanuts, cashews, pineapples, hot peppers, papaya, pumpkins and squashes. The Spanish made available such American species as tobacco, chillies, pineapples, sweet potatoes, corn, avocado and guavas.23

Tobacco provides an excellent example of flows and adopting. In the early seventeenth century the rulers of both England and Mughal India fulminated against the disgusting habit of smoking the noxious weed. Within the Portuguese empire the main production area was Bahia, from whence it was exported either direct to Goa, or via Lisbon and so to the

Indian Ocean. The Portuguese also sent it to Macau, and into Qing China. Indian peasants were cultivating it with some enthusiasm by the early seventeenth century, and indeed many crops were taken up in new locations as a market appeared. Coffee originated in Yemen, but once a demand for it appeared in Europe, around 1700, the VOC picked it up and established plantations in Java. Around 1715 Java produced less than 2,000 pounds, but twenty years later it was producing nearly 6 million. 25

The source of other products did not necessarily change, but the pattern and extent of distribution did. Tea from China is the best example. In 1701 for the first time the EIC imported over 100,000 lbs of this mild stimulant; this soon rose to over 1 million, and from 1747 was very seldom less than 3 million. Cowry shells, a humble and very important currency, provide another excellent example which we have mentioned before (see pages 84– 5). The best examples of this gastropod come from the Maldives. These shells were very widely used indeed. They were especially prevalent in the Bay of Bengal, but they were also used in Timbuktu, Benin, and in the valleys of the Ganga and the Niger. Most African slaves were purchased with cowries. Other wide connections are legion. There was a 'seal rush' in the 1770s. Sealers from New England hunted seals in the southern ocean, sold the skins in Guangzhou, and took home tea or silk. In the early eighteenth century the famous and luxurious 'gold cloth' of Gujarat was purchased by the mikado of Japan, the king of Thailand, and the Zaidi imam of Yemen. One of the best markets for madeira wine was the European communities in India and Guangzhou. Pirates operated globally (see page 000). The 250 or more blue and white willow-pattern tiles in the Cochin synagogue came from China around 1760. And so on....

Nor was it only people and products. Religious chains of authority spread, in the case of Christianity, all over the world, while Mecca was the sacred city for Muslims from all over the world. The vast seventeenth-century Baroque churches in Old Goa, especially the Sé Cathedral and the Basilica of Bom Jesu, are based on European models, albeit with some Indian input in decoration.

As people moved, so also did disease. The massive mortality in the Americas was not matched anywhere in the Indian Ocean world, because

the area had been for centuries part of a Eurasian, or Afrasian, disease pool. The only important example of a new disease reaching the Indian Ocean was a much more virulent version of syphilis. It is believed that someone on Columbus' second voyage was responsible for bringing the infection into Europe, where it spread with remarkable rapidity. There was a case reported from Guangzhou as early as 1502, and in 1505 the Italian Varthema in Calicut claimed that the ruler had 'the French disease ["Frangi"] and had it in the throat.'26 However, it was not new diseases which affected populations around the ocean so much as faster communications, and increased densities of people in certain places: examples are the hordes congregated for the hajj, and the increasing populations of the port cities, especially from late in our period. Greater population concentrations meant that the protection provided by the vast expanses of the ocean was overcome, and crowd disease, such as cholera, smallpox and plague increasingly flourished; they had of course been present for many centuries.

It is time now to turn away from products, crops and politics, and look at people moving over the ocean for religious reasons. We will look at conversions, at the travels of religious exemplars keen to fortify the faith of their followers, and at pilgrimage in the context of widespread travels over the ocean. These three matters are very intricately mixed, but for heuristic reasons we will separate them to an extent. For that matter, there also are important links and connections with all of the preceding discussion: for example, the Portuguese opposed the Muslim pilgrimage, arguably the activities of their fleets hindered their own conversion drive, and most pilgrims chaffered their way to their destination, thus engaging in trade.

Conversion is a rather nebulous term. It is best to see it as a long process, taking perhaps several generations. There are entry points to be sure. For Muslims, to pronounce the profession of faith – 'There is no God but God, and Muhammad is his Prophet' – is a start. For Christians it would begin with baptism. However, for the exemplars of both of these religions the task then was to consolidate and improve. A whole world of social habits, customs, beliefs had to be set aside. The aim was not additive change, where a new superstructure was imposed on a bedrock of existing believe, but rather substitutive change, where a totally new world view was imposed. This is where people I refer to as rectifiers were important; these

men strove to improve the quality of religious practice of people who were already, ostensibly, members of their faith. For these people the term missionary would be inappropriate, for missionaries try to spread, not improve, the faith. We will begin with conversions.

The two main drives were those led by Muslims and Christians. However, it was only the Catholics who spent much effort on this: the Protestant Dutch and English provided spiritual counsel for their own people, but made no effort to convert anyone else. There are many similarities, and many contrasts. The Muslim effort was much more inchoate than the Christian one, which was directed from Europe — from Lisbon and from Rome. Christian missionaries were supported by the political authorities, Muslim ones much less so. Christian missionaries were foreign, Muslim ones rather less so. On the other hand, both frequently relied on the time-honoured 'trickle down from the top' technique, whereby great effort was put into converting a king or other political figure, with the expectation that his subjects would then follow suit.

Muslims obviously had a head start over the Christians in their race to convert people. We described some aspects of their conversion efforts in an earlier chapter (see pages 76–80). Accounts, or more correctly complaints, by Christian missionaries give us good information on how Islam was spread. As a Jesuit lamented from Goa in 1560, what was most disturbing and lamentable was 'to see how the *cacizes* [Muslim divines] of the accursed and abominable sect of Muhammad confound us, because they come from Mecca and from Persia and from many other places to infect and corrupt the poor Hindus who are almost tabula rasa', and their message had a very great appeal indeed. Often they won by default; what was needed was more Christian missionaries to counter these overly successful Muslims. The same Jesuit added that

the partisans of Muhammad don't sleep, rather their *cacizes* make themselves into seamen, and thus can go around preaching their accursed sect; and they have done so well that it seems incredible the number of gentiles that in a few years have here submitted to this evil sect, and I believe that here they have a great advantage over us.

Another Jesuit at the same time expanded on this Muslim conversion technique, describing again how they travel as 'lascars, which is the same as

sailors', on Portuguese boats even, and sowed their 'evil seed' wherever the boat called, even as far as China, Siam and Java.

The main arena in our period was southeast Asia. Western Indonesia was converted before the Portuguese and Spanish arrived, mostly by new Muslims from India, especially from Gujarat and other coastal areas. It is a matter of missionary activity undertaken by people themselves relatively new converts, and again the mechanism was trade and the use of the sea as a highway for the spread of Islam. It is debatable whether Muslims who were responsible for converting large numbers of people in southeast Asia can be described precisely as 'missionaries'. Few Muslims who spread their faith in the area were religious specialists engaged in fulltime proselytisation, in the way the members of the Christian orders were. Most conversions to Islam apparently were made by people who were traders or travellers, pious no doubt but engaged in worldly activities also. Many traders were members of Sufi orders, and indeed it is a matter of degree, for while most were primarily traders, a few were religious guides for their fellow Muslims and also people interested in spreading the faith.

Once the Portuguese arrived they engaged in vigorous competition with their Muslim rivals. The situation in Siam in the middle of the sixteenth century was well described in a letter by the adventurer-turned-religious Fernão Mendes Pinto. He told his Jesuit fellows that there were various religious beliefs followed in Siam, but the Muslims were doing very well. Already in the capital there were seven mosques, with foreign *cacizes*, and 30,000 hearths of Muslims. Proselytisation proceeded apace. The king, however, maintained a hands-off attitude to the whole matter: 'The king lets everyone do what they want; they can be Muslim or gentile, for he says he is king of nothing more than their bodies.'

The Christian missionaries tried to work from the top. This worked well in Japan, but not so much elsewhere. In India the Jesuits hoped to convert the Mughal emperor Akbar, after which the rest of India would follow. Hence the ecstatic claims from time to time that the Great Mughal was listening to them, was favourably inclined to them, was now no longer a Muslim, and indeed on occasion that his conversion was imminent. Alas, the hopes were all ill-founded, showing no doubt a Counter-Reformation failure to

understand how Akbar could find some merit in all the great religious traditions. As was ruefully noted, he remained as Muslim as he had ever been. So also at a more humble level in Goa, where they encouraged the elite to convert, offering them jobs and other favours in return. In 1548 Lakshman decided to convert. He was a great catch. The bishop performed the ceremony, the governor stood as his godfather, and, now called Luquas de Sá, he was given an important government post.

Letters home to Europe from the religious often complain of the lack of support they received from the secular authorities. Most Spanish and Portuguese governors and captains put political, and especially economic, matters before conversions. Indeed, the efforts of the missionaries were often hindered and obstructed, rather than facilitated, by their fellow Christians. In many areas of seaborne Asia the Portuguese in the sixteenth and seventeenth centuries had unenviable reputations. This was both at an official and individual level. The Portuguese tried forcibly to monopolise trade in spices and some other products, and direct other Asian trade, forcing all sea trade to pay customs duties to them at their forts. Most sea trade in the Arabian Sea, and increasingly also in island southeast Asia, was handled by Muslims; this political and economic conflict spilt over into religious hostility, indeed the two were symbiotic and fed on each other.

Nor was it only the official policies of the Portuguese state which contributed to their unsavoury reputation. The conduct of private Portuguese traders also at times lowered the reputation of them all. It is true that these private traders simply operated in Indian Ocean waters on a basis of equality with any other petty traders, but even so their moral reputation seems to have been a low one; again this must have exacerbated the difficulties of their compatriots who were trying to make conversions, and must have made the task of the competition, the cacizes, that much easier. A longish account, admittedly by a hostile Spanish priest, makes clear precisely this problem. Writing in the later seventeenth century about Cochinchina, he said that

The Women there being too free and immodest, as soon as any Ship arrives, they presently go aboard to invite the Men; nay, they even make it an Article of Marriage with their own Countrymen, that when Ships come in, they shall be left to their own Will, and have liberty to do what they please.... A

Vessel from Macao came to that Kingdom, and during its stay there, the Portugueses had so openly to do with those Infidel Harlots, that when they were ready to sail, the Women complained to the King, that they did not pay them what they owed them for the use of their Bodys. So the King ordered the Vessel should not stir till that debt was paid. A rare Example given by Christians, and a great help to the conversion of those Infidels! Another time they were so lewd in that Kingdom, that one about the King said to him, 'Sir, we know not how to deal with these people, the Dutch are satisfied with one Woman, but the People of [Portuguese] Macao are not satisfied with many.'

It is difficult to quantify the relative successes of these two protagonists, or antagonists. On the Muslim side, leaving aside the totally Muslim Middle East, we can remember a strong Islamic presence on the East African coast - indeed one way to define the Swahili is to note that they are Muslims, unlike most of their fellow Africans. In South Asia as a whole, including Pakistan and Bangladesh with India, the total Muslim population today is something under 400 million. The Malay world is solidly Muslim, excluding Chinese migrants brought in by Europeans in the nineteenth century. On the Christian side, their share of the populations of the first and third of these areas is minuscule. We have some indications of how they fared in India in this period. It has been estimated that by the end of the sixteenth century there may have been 175,000 Christian converts in all of India, most of them poor fisher folk. Descendants of these converts are to be found all over India, and Asia, today. No doubt this is a substantial achievement, yet there are some hesitations to be expressed also. First, India had a population in this century of about 140 million, so from this perspective the missionary success was rather limited. The greatest success was obviously in the city of Goa itself, where at this time about two-thirds of the population were Christian. However, in the whole territory of Goa, the Old Conquests, Christians at most made up one-quarter of the total. In contrast, a very rough estimate of the Muslim population of South Asia in around 1600 would find perhaps 15,000,000 people.

Once people converted they often undertook pilgrimages to religiously significant places. From the Christian side, a visit to the two most obvious sites of the Holy Land and Rome was hardly possible, except for a handful of priests to Rome. Certainly there were minor pilgrimages to the tombs of holy men. St Francis Xavier, the Apostle of the East, is the best known of these, and even today his birthday is celebrated in Old Goa with great eclat.

The regular expositions of his miraculously preserved body also encouraged this cult. Parts of it were even abstracted, either openly or surreptitiously, so that a lucky few had their own personal relics of the saint. Yet surely it is significant that the crowd at his birthday celebrations includes many Hindus, and indeed some of no particular religion at all. He has become in effect a generic holy man. In many other areas also Indian Ocean Christianity, despite the intolerance of Counter-Reformation Catholicism as seen especially in the work of the Inquisition, in many areas continued to include pre-Christian customs and beliefs. Conversion was a two-way process, with much retained from previous religious practice. In many social areas Hindus who had converted to Christianity retained their old customs. Various food prohibitions and notions of pollution continued to be influential. Sometimes Indian Christians seem almost to merge in with Hindus, in an eminently tolerant way. The best example, and the most studied, is the continuance of caste notions in families who have been Christian for centuries. Christianity in India, then, owed as much to its local environment as it did to the norms of Rome.

Hindu pilgrimage certainly occurred, but exclusively by land, so that we will pass this by except to point out that their places of pilgrimage are usually aquatic, being located on the sea shore or rivers. Buddhist pilgrims from East Asia mostly travelled by sea to visit the holy sites in north India associated with the Buddha. We have no hard evidence of Japanese Buddhists reaching India in this period, and indeed the journey would have been an arduous one. One pious Japanese Buddhist worked out, presumably to explain why he never went, that to travel from Japan to India would take 1,000 days at eight miles a day, or 1,600 at five miles a day. He had to make do with a stone that he found on the coast of Japan: 'Thinking that the water poured upon the sacred remains of Buddha flows into the ocean, I feel especially familiar with this stone found on the seashore.'27 We can assume that some followers of the path in Burma and Sri Lanka made visits to north India. Certainly there was travel for religious reasons between these two Buddhist countries. It has been claimed that when Buddhism in Sri Lanka was under attack from the Portuguese in the sixteenth and seventeenth centuries, Arakan played a vital role in preserving Theravada Buddhism until tolerance returned to Sri Lanka.28

By default, then, the greatest pilgrimage in our period was that of Muslims to the Holy Cities of Mecca and Medina; indeed to do this is to fulfil one of the central requirement of Islam. In the early modern period some 15,000 from India undertook this pious obligation each year, out of a total of up to 200,000.29

The hajj had a multitude of significances. First of all, it was a pious obligation. However, small-scale economic activity was generated by the peddling of the pilgrims as they made their way to the Red Sea. Most of them supported themselves by trading, using their goods as needed to buy passage, food and accommodation, in a way analogous to the modern travellers' cheque. At the actual time of the hajj, a period of a few days in Mecca, the town was host to a massive market in a great variety of goods. Many were secular, but some were infused with religious significance. Burial shrouds soaked in water from the sacred well of Zamzam, bits from the brooms used to sweep out the Kaba, pieces of the ornate cloth covering of the Kaba, these and many other items found a ready market.

There was also a political dimension to the hajj. Control of the Holy Cities passed in the sixteenth century from the Mamluk dynasty in Egypt, which had only a vestigial control over the hereditary sheikhs of the cities, to the Ottoman Empire. The sultans took very seriously their role as Guardians of the Holy Places, did public works in the two cities, provided food to the inhabitants, and financed the vast pilgrim caravans from Cairo and Damascus to the Hijaz. Muslim Indian rulers similarly patronised those wanting to go on hajj.

We have no good data on numbers of pilgrims from East Africa, nor from southeast Asia. But we do have evidence of quite extensive contact with Mecca in the sixteenth and seventeenth centuries, and indeed with other centres of Islamic power. The sultanate of Banten maintained important links with Mecca. These were for religious guidance and patronage. In 1638 the Meccan authorities bestowed the title of sultan on the ruler of Banten, and his son twice made the hajj. In 1581 the Portuguese saw a ship, which apart from a very rich cargo had on board 150 women, these being among the most noble of the kingdom of Pegu, who were going with very rich

presents to offer them to, as they put it, 'their false prophet and legislator Muhammad'.

The effects of a visit to Mecca could be various indeed. Regrettably, it sometimes led to an increase in intolerance. In the 1630s Lobo travelled by sea from Suakin, on the west coast of the Red Sea, to Diu:

The ship carried many people, most of them pilgrims to their accursed, detestable house, by which I mean that of Meca, where Mafoma [Muhammad] is buried [sic]. Once these people have visited it, they receive from the Xarifes there an indisputable pass to Heaven; and when they leave Meca in this sanctified state, nothing is more loathsome to them than to meet with Christians, for they believe themselves contaminated if they see or have any dealings with us, so pure in body and soul do they consider themselves when they leave that place. For this reason they very much begrudged our being on that ship, imagining that their purity would be spoiled by our presence there, for they avoided all communication or conversation with us, so that when they arose in the morning and their eyes were unavoidably struck by the sight of us . . . they would immediately spit in the other direction as if they had seen the vilest thing in the world....31

Those who returned home from the pilgrimage had acquired very considerable prestige. In part they were considered to be daring people indeed for having undertaken the long and dangerous sea voyage across the Arabian Sea. They also were now able to stand forth in their home communities as exemplars of Islam: here is how they do it in Mecca; people in Mecca say this and that, and do this. In the Maldive Islands in the early seventeenth century those who had been on hajj were allowed to wear their beards in a distinctive style.

Those who have been to Arabia, and have visited the sepulchre of Mahomet at Mecca [*sic*], are held in high respect by all the world, whatever be their rank, and whether they be poor or rich; and, indeed, a great number of the poor have been there. These have peculiar privileges: they are called *Agy* [hajji, one who has done the hajj]; and in order to be recognised and remarked among the others, they all wear very white cotton frocks, and on their heads little round bonnets, also white, and carry beads in their hands without crosses; and when they have not the means to maintain themselves in this attire, the king or the nobles supply them, and fail not to do so.32

These people were engaged, in a modest way, in trying to 'purify' the religion, to root out customs and behaviour which they claimed had no place in 'pure' Islam. In this they had a Christian parallel in the activities of

the Inquisitors in Goa, and priests sent out from Rome to rid Indian Catholicism of its deviations and errors. The much-feared Holy Office of the Inquisition was the supreme example of intolerant Counter Reformation Catholicism. Xavier was scandalised by what he saw in Goa, considering many local converts and also Portuguese to have strayed far from the faith. He recommended that an Inquisition be established, though this was achieved only eight years after his death, in 1560. However, even before this heresy did not go unpunished. In 1543 a New Christian physician, that is a Jew converted to Christianity, was convicted by the ecclesiastical court of relapsing to Judaism. He was sentenced to be burnt, but this sentence was reduced after he confessed and apologised. He was strangled before he was burnt.

The Inquisition was concerned to root out vestiges of Hindu practice amongst those recently converted. This was a very harsh regime, for many conversions had been hasty and superficial. Consequently many new converts could offend out of ignorance and yet still be subject to the rigours of the Holy Office. What seem to be social practices deriving from past religious practice were condemned, such as refusing to eat pork, wearing such Indian clothes as a *dhoti* or *choli*, cooking rice without salt, 'as the Hindus are accustomed to do'. Those who, probably in all innocence, offended were hauled off to be interrogated – a total of 3,800 between 1561 and 1623.

There was no such tribunal in Muslim lands. What sorts of things were the Muslim purifiers concerned about? We have ample evidence of rather unorthodox practice in many areas of the ocean littoral, though we are making no value judgements at all. Unlike previous western writers on Islam, we do not seek to condemn local people who failed to follow the letter of the Law, the Shariah.

We quoted earlier some derogatory comments on the quality of Islam as seen by people from the centre (see pages 161–2). In 1542 in Malindi Francis Xavier met his alter ego, a chief 'caciz', who complained that the local Muslims were extremely slack in their observance. Once there had been sixteen mosques in the town, but now there were only three, and even

these were poorly patronised. An account of Sofala, in the far south, from 1588 claimed that

The Mahometans that at this present doe inhabite those Countries, are not naturally borne there, but before the Portugals came into those quarters, they Trafficked thither in small Barkes, from the Coast of Arabia Felix. And when the Portugals had conquered that Realme, the Mahometans stayed there still, and now they are become neither utter Pagans, nor holding the Sect of Mahomet.

Members of various Muslim Sufi orders, and of schools of law, travelled widely in a quite organised way to achieve greater observance. They were much more conscious of what they were doing than were the generality of returning hajjis, whose role was much less directive. A typical rectifier would study in Mecca and Medina and other centres, and then go to the periphery of the Muslim world, where they had very great prestige. As an example, we know something of the career of 'Abd al-Ra'uf of Singkel, and this gives us a clear picture of the many ties, networks and connections established in seventeenth-century Islam, and of the centrality of the Holy Places in this process. He was born in North Sumatra around 1615, and in about 1640 moved to the Hijaz and Yemen to study. In Medina his main teacher was the Kurdish-born Ibrahim al-Kurani. He spent a total of nineteen years in Mecca, and gained very considerable prestige. In particular, he taught hundreds, even thousands, of Indonesians there, and initiated many of them into the Order of which he was a distinguished member, the Shattariyya. He returned to Sumatra, to Aceh, in 1661 and was a revered teacher there for nearly thirty years. He kept in touch with Ibrahim in Medina, and taught what he had learnt from him to the many Indonesian, especially Javanese, pilgrims who stopped for a time in Aceh on the way to the Red Sea.

So also in India. Hajji Ibrahim Muhaddis Qadiri was born near Allahabad in northern India. He did the hajj, and then studied in Cairo, Mecca and Syria. He was away for twenty-four years, but then returned to India, settled in Agra, and was a prestigious teacher until his death in 1593. A final illustration of the wide ties and influence of these scholars again comes from Indonesia. Shaykh Yusuf was born in Makassar (on Sulawesi) in 1626, and was related to the ruling dynasty. He converted to Islam, and did a hajj at age eighteen. In typical fashion, he then studied in Mecca for several

years before he went to Banten where, with his Meccan prestige, he was a very influential religious leader to the sultan and court. In 1682 the VOC conquered Banten, and Yusuf led guerilla resistance to them. Finally he surrendered and was imprisoned in Jakarta. Then he was exiled to other parts of the VOC's dispersed maritime empire: first to Sri Lanka, and in 1694 to the Cape Colony along with two wives, other family, and twelve disciples, a total in all of forty-nine Muslims. The Company tried to isolate him, but even so he was able to make a few converts before he died in 1699.33

We have seen both normative and folk elements in Christianity and Islam, and these were both to be found in the various rites, ceremonies, and practices of men in trouble at sea, or men trying to get divine blessing for a safe passage. Horden and Purcell made two useful comments about this matter in a Mediterranean context which apply equally well to the Indian Ocean. They point out that rites performed on ships were 'not a superficial sprinkling of the holy onto the mundane and normal, but an integral part of the way that the world was experienced.' So also, in a landed context, they comment on 'the apparent continuity or repetitive similarity of religious responses to the environment in different periods, under different religious systems.'34 We will find that seamen from different faiths often mirrored the rites of those of other faiths, even if this was not usually acknowledged.

Portuguese ships nearly always had priests on board, and they played a prominent role on the voyage. Priests about to embark on the carreira to India were excused from Lenten fasts so they would be strong enough to withstand the rigours of the voyage. They did general confessions before the ship set sail, so that any who died on the voyage would have no, or few, unconfessed sins. They led processions around the ship if it was in danger.35 A voyage of 1629 was perhaps typical. The Jesuits on board spent much time hearing confessions and ministering to the sick. One of the ships ran aground, and the Jesuits on board spent the entire night on the poop hearing confessions, so that those who were to die would be in a state of grace. When another ship ran aground a priest calmed the sea by suspending holy relics in the water. He then heard confessions, and distributed devotional objects to all and sundry.36

St Francis Xavier was often called on to protect ships in peril. A Jesuit wrecked off Mozambique struggled ashore, pushed and buffeted by an incoming tide, his feet badly cut and bleeding from the sharp coral. To add to his peril, he was no swimmer. Regardless, he carried a relic of Xavier around his neck, and so was saved. Father Lobo decided to return to Portugal on the beautiful new ship the *Belem*:

Not the least of my reasons, among others, for liking this ship were that it was said to be less heavily loaded, that it was a powerful ship, and that Saint Francis Xavier had performed a great and evident miracle by defending it one crucial night on its voyage to India [in 1633]. At anchor on the bar of Mozambique, the carrack was being battered by a furious storm which had broken four of the five cables. Since there was no reason to believe that one could hold where four others had failed, the poor sailors placed all their hope in a relic of the saint, which they lowered into the water with the sole remaining cable. The winds increased in fury and the people saw cruel death before their eyes at every moment, since they were so close to the reefs that they could not have escaped alive if that single cable had not held fast all night long, which the four other cables had been unable to do. What was even more remarkable was that it could do this without any flukes on the anchor, for both had broken off leaving only the shank, as they discovered in the morning when they hauled it up. This miracle was authenticated, announced, and celebrated in India with demonstrations of admiration and joy.38

Muslims had similar ways to avoid peril at sea. At the end of our period a Muslim crew were at the entrance to the Gulf, and 'to propitiate the deity or genius loci – setting afloat a little ship rigged and in sailing order, bearing a sample of all merchandise carried for sale in the vessel which sends her forth. Prayers for her safety are uttered on launching her, and if she makes for shore the crew consider them granted.'39 Abbé Carré in 1673 wrote down a whole host of things that Muslims did. They tied little paper flags to the mast, inscribed, so he said, with the sayings of Muhammad, though it was more likely the nautical saint Khwaja Khizr. They took around basins to collect all sorts of food, and then threw it overboard. They all bathed in the sea 'in order to wash away the dirty impurities they commit with their young slaves, of which there were more than 200 in the ship.' They searched all the baggage for bones being taken back for burial in Persia, as these were bad luck. 'In short, we were about twenty days practising these superstitious antics, which, however, were of very little use.'40

Some Hindus certainly travelled by sea, normative prohibitions and much academic writing to the contrary, but they had to avoid contact with polluting food, water and people. This could lead to problems, as Dean Mahomet found out:

A considerable Banyan merchant was on his passage from Bombay to Surat, in an English ship, and having made such provision of water in vessels under his own seal, as might serve for the short voyage, which was commonly completed in two or three days, it happened however that, through retardation by calms and contrary winds, his liquid store was expended, and he reduced to a condition of perishing with thirst, though there was plenty of water on board; but, no entreaties could prevail on him to use it, as his religion forbade it, which to him was more dear than life itself. He felt all the torments occasioned by the fever of thirst, and would have actually sunk under them, had not a favourable breeze springing up, brought him to Gandevi, near Surat, but he was so faint on his arrival, that his soul was almost panting between his lips. 41

The final illustration must be a long and comic account by the Jesuit Manuel Godinho. If we ignore his ethnocentrism we can see a strong degree of commonality between the practices of the various religions. The rites and ceremonies were different, but all of them were believed to deliver intercession and a favourable outcome. In 1663 he was on a Muslim ship going from Surat to the Gulf. He had disguised himself as a Muslim. When they got near Muscat the ship was becalmed.

The Muslims failed to perceive that the cessation of winds was incidental to that season [it was February], but thought it was a punishment from God and his false prophet, as there was some unclean person on board. Carried away by this fancy of theirs, the nakhuda ordered everyone, be they Muslims or Hindus or Christians, big and small, men and women, to wash their bodies in the sea, which was calm, and being the first to jump into the sea, he set an example to the rest, who promptly followed it, perforce or willingly.

The nakhuda tried to get Godinho and his European companion to jump in too, which would have given them away. Luckily a shark appeared and he was excused.

The first remedy for restoring the wind having failed, they devised yet another that might have brought us all to ruin. It consisted of hanging from the poop a small wooden horse with a very long tail, to the sound of flutes and small kettle-drums, and, lo and behold, the very moment the horse was

hung there broke out a north wind, the direction towards which its head was pointing, so strong and so severe, that we flew within a day and a half to the coast of Arabia Felix....

Indeed the rite had been too successful, for the wind was so strong that the boat was in danger of being wrecked, and Godinho was very worried, but

then the Hindus on board, of the Bangassali brahman caste, approached me saying that I must not be discouraged and should hope to overcome the peril, as they would soon attain the desired calm by performing a ritual to their Rama. And, having said that, one of them drew out from his pannier a metal idol, the image of Rama, a hand-bell and two cymbals of the same metal, and took all that to the prow of the ship, where he was joined by the rest of the Hindus, dressed in clean clothes, and after singing, playing music and dancing before the idol, they covered themselves with some red scented powder called sindhur. Soon thereafter they went in procession around the ship, singing songs to the beat of the cymbals and distributing fragrant ointments, biscuits, sweets, coconuts and sugar to everyone present; at the end of the procession they threw a coconut into the sea, against the wind, and carried on singing and dancing into the night. However, as far as I could see, their prayers and processions served no other purpose than to pass the day cheerfully, because the storm did not abate and the Muslims began to laugh at the Hindus. No idol has ever countered the works of the devil nor has the latter raised a storm that destroyed an idol.

Godinho had a bad time with the Hindus, as they revered all life, and so deloused themselves and threw the lice on his bedding, for they refused to kill them. They also offered to ransom a cow which was due to be slaughtered for food on board, but it died anyway.

When they got near the entrance to the Gulf they hit another storm, and the ship was in grave danger:

The ship bobbed in and out of the water, like a buoy at the mercy of the winds and the waves which were leading it towards the Persian rocks. The clamour from the women, crying by the children, shouts from the sailors, confusion among the officers, fury of the winds, raging of the waves, flashing of thunderbolts, pitch darkness of the night, crashing of thunder, recurrence of lightning, breaking of the seas, whistling of the rigging, and finally the fear of death in all, were such as anyone who has been through such a misfortune will realise.... I recited the Sub tuum praesidium [We fly to thy patronage, that is of the Virgin] from the time the storm began. On seeing that it still persisted, the French cleric approached me, more dead than alive, and both of us, on our knees, made several vows to the entire heavenly court, as any single saint alone appeared less reassuring in that sort of danger. Then, addressing ourselves to God, we reminded him of the honour of his holy name which was

being blasphemed by those infidels, the Muslims saying that it was a punishment meted out by God and his false prophet because the nakhuda had obliged me by not going to Muscat [Godinho had bribed him to sail past Muscat, but most of the Muslim merchants on board wanted to call there], disappointing his own co-religionists. The Hindus attributed the storm to the death of their cow, but also joined the Muslims in reviling the Christians. And, lo and behold, hardly had we completed the said reminder to God, when all of a sudden the wind changed direction from south to north, and from stormy it turned to mild. The waves then propelled the tired ship to this other side of Arabia, and it moved quite fast over the waters because a lot of cargo was being jettisoned. God is so zealous of his holy name that this is not the first time he has refrained from punishing sinners in order not to discredit it amongst infidels....

Then they were trying to get around a cape at the entrance to the Gulf.

Around midday, on that day, a tiny ship, seven spans long and two in width, came alongside the deck. It resembled our ship in every detail, from the shape of its hull down to the sails, rigging, flag and everything else. Soon a sailor sounded the kettle drums and the ship's master blew his whistle and everyone on board, both Hindus and Muslims, got together, each with samples from the goods he carried in the ship, and placing these in the tiny ship, they set it out into the sea with much rejoicing, and everyone on board watched as the little ship moved away, driven by the wind which filled its tiny sails, until it was out of sight in rounding the cape. On inquiry as to the significance of that observance, I was informed that it was a tribute all ships paid to the Masandam cape, which was otherwise so wicked that those who defaulted it on the way up from India could surely consider themselves lost on their return journey, and that the gift had ensured them a safe passage. If the Cape of Good Hope could be satisfied as easily, we might as well have paid it a similar tribute each year, but I do not think it is as amenable as that of Masandam. When the Portuguese, English and Dutch ships, which invariably carry Hindus and Muslims, pass that way, they too perform the same ceremony, but they load the little ship with the entrails of cows and of the other animal, which the Muslims do not eat, in order to deride their superstitions, which annoys them greatly.42

We have been getting close to actual life on board ships in the Indian Ocean in the early modern period, and we can close this chapter by going on board and looking at actual voyages. It is time for a whiff of ozone. A concluding section inspissated with first-hand accounts may relieve the tedium of the long analytical sections to which I have subjected the reader. Many of the accounts we will quote give vivid portrayals of the hazards of ocean sailing at this time, hence the important role of the rites and superstitions we have just quoted. Here is an account by Father Lobo of a passage back to Europe.

The good father had started the voyage badly, suffering terribly from seasickness in a way which must bring back bad memories to anyone who has suffered from this:

the nausea with which my stomach kept churning and vomiting can only be known to those who have experienced it, even vomiting all the various humours, according to the colours by which each one is recognised. Eating, drinking, and all other human functions are entirely impossible during those days. Finally, there is no other human illness that can be compared with this in the effects, vomiting and terrors it causes. The illness fortunately lasts no more than 8 days and the suffering of that week leaves me with complete freedom from this kind of torture for the remainder of the voyage.

Subsequently the ship got into trouble. Here is a vivid account of a storm from Father Lobo:

To the southeast the sky was so heavy, dark and fearsome that it was obviously preparing to break loose against us with great force, which it did so treacherously, however, that, as if it were trying to catch us suddenly and unawares, no matter how forewarned and attentive we were, we were unable to escape the sudden burst of a furious blast of wind called a typhoon or hurricane which came after a sharper wind than the one which had been blowing for some time, which had only caused us to be watchful. The sails kept taking the wind and swelling to the bursting point despite everyone shouting 'Strike sail! Strike sail! Knowing that the foe was with us, we could not escape damage now, and in a moment it tore all the sails in pieces without leaving us a useable shred. The impetus was so strong that, if the sails had not been old and had been capable of withstanding the weight of the wind, the masts and yards would certainly have been smashed to pieces, falling on the ship with all the danger involved in such happenings....43

Apart from storms, there were other natural hazards at sea. Edmund Barker in 1591 in Lancaster's ship, the first English expedition to the east, had just got around the Cape of Good Hope into the Indian Ocean.

In the morning, toward ten of the clocke, we had a terrible clap of thunder, which slew foure of our men outright, their necks being wrung in sonder without speaking any word, and of 94 men there was not one untouched; whereof some were stricken blind, others were bruised in their legs and armes, and others in their brests, so that they voided blood two dayes after; others were drawen at length, as though they had bene racked. But (God be thanked) they all recovered, saving onely the foure which were slain outright. Also with the same thunder our mainemaste was torne very grievously from the heade to the decke, and some of the spikes, that were ten inches into the timber, were melted with the extreme heate thereof.44

Men often provided additional hazards. For example, when Lobo's ship was in grave danger, they decided not to appeal for help from an accompanying Portuguese ship, for 'it was not a good thing for our ship's condition to be known on the other ship because its loss was so obvious that they would abandon us in order to reach Portugal more quickly so that those aboard could make a better sale of their spices.'45

In February 1673 the Abbé Carré met a host of difficulties as he set off from Surat.

About midday, having shipped my baggage, food, and everything necessary for my voyage, in one of the Company's boats, I went in it to the large Surat roadstead, where there were twenty merchantmen preparing to sail for many oriental countries. I embarked in one belonging to Agha Rahimi, a leading Moor merchant of Surat. He arrived on board his ship at the same time as myself to give his last orders and to see her off, which was accomplished only with a great din and hubbub. A rich and influential Persian merchant, who had chartered half of the ship for his own use, on seeing four large boats of extra merchandise intended to be brought on board the already laden ship, flew into a furious rage with the ship's master. The latter, for some 200 écus more freight, was quite prepared to risk his ship, which had 500 passengers and more than a million écus worth of cargo, by overloading it. There have been tragic examples of this danger recently, as four good ships were lost last year on this account, while leaving the Surat roadstead. The merchants who were passengers all took the part of the Persian and were against Aghe Rahimi, threatening to leave his ship, if he put on any more cargo. He was therefore compelled to send back this extra merchandise to Surat; but, before leaving us, he recouped himself for the loss of this freight by raising the fares for the voyage to Persia, and making us all pay double the amount generally charged for it.

Even once the voyage actually got under way things did not improve.

Our nakhoda, in concert with the ship's captain, seeing the large number of passengers on board, now asserted their rights in regard to accommodation in a surprising way; and I can safely say that no lodging in Paris was as dear as the places in this ship for the month's voyage. The ship's state-room had been hired before departing for 1,000 écus [£225] by our rich Persian merchant for his half-dozen wives, as he wished to keep them out of sight of the rest of the passengers and under his eye. The two middle-sized cabins under the poop each cost 300 écus [£67.50], and other small places and corners six or seven hundred livres [£45–47.50]. Rich merchants were paying such sums to keep their wives in seclusion; and as there were a great number of the latter on this voyage, there was considerable difficulty in finding accommodation for them. I had arranged matters with the captain, who gave me a suitable place near him, where I was not inconvenienced in any way.46

The Abbé whiled away his time on the voyage with mild flirtations with the 'half-dozen wives'.

Increasingly during our period local traders and travellers preferred to travel on European ships, or at least ships with European crews. They were considered to be safer, and less vulnerable to piracy. Yet even this did not always guarantee an agreeable passage. The Persian ambassador, Sulaiman, set off from Coromandel on an English ship bound for Thailand.

As our port of destination was not very far off the captain did not think it necessary to take on large amounts of food but as it happened the wind died down, the food became scarce and all aboard were reduced to the most dire circumstances. During those days a useless piece of bread six months old, all sour and full of worms and ants would be eaten without the least hesitation. That old crust seemed to be the finest honey.47

These could well be extreme examples. We have to assume that most voyages were more or less routine, with boredom the main hazard for the passengers. Jean Aubin recreated such a voyage from Goa to Hurmuz in the early sixteenth century, which may stand as a pattern of a 'normal' passage. The ship concerned was a cranky old tub which had belonged to the Bijapuri governor of Goa. It was captured in 1510 when the Portuguese took the city, and renamed Santa Maria do Monte. With a cargo of rice and iron it took seventy-seven days to get to Hurmuz, and then had to wait for the right monsoon to get back to Goa. The whole, rather minor, voyage took a year. On the outward voyage there were 140 on board, six cows, and 174 tons of cargo. It brought back seventy-one horses. The captain was Italian, most of the crew Muslim, including the pilots and the bombardiers, and even the musicians. There were several passengers, some Portuguese and some Armenian. The Portuguese had nine slaves with them, who helped on the ship. There were also four women, and with them seven servants and family members. All in all it was a very normal and undramatic voyage.48

Voyages on the rivers of northern India could even be quite relaxing and pleasant. In the 1740s a French visitor to Bengal travelled up river on a bazara, a long and light boat with a roof covering the passengers. His one had sixteen oars. They were shaped like a balloon, that is lower in the middle and high at both ends, this being so that when they ran aground on

the shallow parts of the river they could be easily refloated. 'These kinds of boats are extremely convenient. In this one there was a quite spacious room where two of us slept in comfort, and another in the rear where the third person slept. A boat with kitchen arrangements followed us', and he also had his interpreter with him, and someone to carry his parasol. They proceeded at a leisurely average of six leagues, about twelve miles, a day.49

So agreeable was river travel that some people, both Indians and Europeans, actually went boating for fun. The Portuguese in Macau and Goa sometimes set off in the evening for a cruise. Dean Mahomet arrived at Dacca, and noticed

the residence of a grand Nabob, who, at his accession to the throne, conformable to an old custom, something similar to that of the Doge of Venice on the Adriatic, enjoys a day's pleasure on the river, in one of the most curious barges in the world, called a samsundar [a processional barge]. It is sheathed with silver, and in the centre is a grand eminence of the same, on which his crown is placed on the day of coronation; nearer the stern is a brilliant seat encompassed with silver rails, and covered with a rich canopy embroidered with gold, under which he reclines in easy majesty. This boat and another of considerable value, that conveys his attendants, are estimated at a lack [100,000] of rupees. He is accompanied by a number of the most distinguished personages, and there are no bounds to the lavish waste of money expended on this occasion, in order to aggrandize the pomp of this ancient ceremony.50

The information that we have on ship sizes at this time is rather patchy. The Surat fleet around 1700 included over 100 vessels, mostly medium size of perhaps 200 or 300 tons. Some Indian ships, especially those owned by the political elite, seem to have been much bigger. Saris in the Red Sea in 1612 measured two ships belonging to the great Mughal noble Abdur-Rahim. The *Rahimi* was 153 feet from stem to stern post, and her rake from the post aft was 17 feet. From the top of her sides in breadth was 42 feet, and her depth 31 feet. The *Muhammadi* was 136 feet long, with a rake of 20 feet, breadth of 41, and depth of 291½2. Her main mast was 108 feet, and her main yard 132 feet.51 By comparison the early Portuguese voyages were accomplished in small ships. In 1497–99 Gama's largest ship was 100 feet in length. The smallest ship ever to do the carreira between Goa and Lisbon, in 1535–36, was a foist 20 feet long and 6 feet wide!52 The largest VOC ships were over 50 metres long, comparable then with the Mughal ships in

the Red Sea. The *Batavia*, the pride of the fleet wrecked off the Western Australian coast in 1629 was 59 metres long.

Many of the great Portuguese naus, and later company ships, were made in Asia. Due to cheaper labour and materials, the cost per ton in India was only half what it was in Europe. One reason for this was that caulking, which was done for European ships built in Europe, was very expensive, and in any case this technique had no advantage over the cheaper traditional north Indian method of rabetting. Indian ships continued to use cables and cordage of coir, not hemp ropes, but coir was perfectly adequate so long as it was kept in salt water to keep it strong. 53

Indian shipbuilders began to pick up some European techniques, such as some use of iron nails in construction. This was done especially for ships engaged in oceanic, as opposed to coastal, trade. European observers appreciated that Indian craftspeople were very skilled, and quite ready to draw on European expertise if this appeared to be superior. Bowrey found ships for local owners being built in Coromandel.

Very Expert Master builders there are Severall here who have most of their dependancie Upon the English, and indeed learnt theire art and trade from some of them by diligently Observeinge the ingenuitie of Some that built Ships and Sloops here for the English East India Company and theire Agents, Soe that they build very well and give good reasons for what they doe, and launch with as much discretion as I have Seen in any part of the world....

He particularly commented on a huge 1,000 ton ship belonging to the sultan of Golconda, which was being hauled out to be repaired.54

In the past few centuries Europeans had been able to improve considerably the ratio between ship size and crew needed. In the fourteenth century one man was needed for each ton of capacity, but by around 1600 the ratio was about one man for every four tons. This ratio appears to apply to Indian ships also.55

The crews on European ships in the Indian Ocean were usually as much Asian as European. The officers might be Dutch or English or some other European, as in the ship we described going from Goa to Hurmuz, but the rest were locals. Carletti travelled in a Portuguese ship from Macau to Melaka.

They were commanded by a Portuguese captain, pilot, coxswain, mate, and other officers, but were manned by Arab, Indian, Turkish, and Bengali sailors, who gladly serve for so much per month, taking care of their own expenses under the rule of their head man, who commands them and whom they call their saranghi [sarang], and who also belongs to one of the aforesaid nations. They make their understandings with him, recognize and obey him, so that even the Portuguese captain, the master and pilot of the ship, is commanded by this saranghi. And they all embark with their wives or concubines, which as a sight is no less indecent than filthy and unseemly, and which causes such confusions as it is impossible to make clear. 56

Sailors seem to have been ready to serve wherever there was work to be had. In 1625 a small Portuguese fleet set off to attack some EIC ships. Of the men on board the Portuguese ships, more than 200 were English, Scottish, Irish and Dutch. Many of the local crew were Muslims, and they seem to have been happy to serve even on ships attacking Muslim ships. The Portuguese fleet sent off to relieve Mombasa from its Muslim conquerors was largely Muslim. On the four ships in this fleet in 1698 there were 126 'white' and 376 'non-white' seamen and gunners.57

Many ships carried large numbers of passengers. All of them carried merchants big and small, but the most passengers were carried on the ships going to the Red Sea full of intending hajjis, and European ships bringing out people to work in the European maritime empires. The largest hajj ships could carry 1,000 or 1,500 passengers. The great Portuguese naus on the outward bound voyage typically had a crew of 120–200, and 500 to 1,000 passengers, mostly soldiers. In Mozambique up to 400 slaves could be added to the ship's complement. The VOC ships may have carried fewer people: 200 on the outward voyage, and only about 110 on the return voyage.

On the European ships officials had to take account of the likelihood of high mortality en route. Over the sixteenth century about 10 per cent of those on board Portuguese ships were lost to disease and shipwreck (see page 138). Gama's pioneering voyage suffered very high attrition: he lost 63 per cent of personnel, and 65 per cent of tonnage during the round-trip. 60 The VOC did much better: they lost only a little over 2 per cent of tonnage on the outward voyages, and 4 per cent on the homeward. The worst area was the south African coast. 61

Mortality, and also speed, improved greatly for the Europeans as they became more accustomed to the wind patterns and best routes. Gama's fastest ship took 733 days for the return voyage, but on the next expedition, led by Cabral, the return voyage for six ships varied between 471 and 505 days. These times include time in port: the actual sailing times of Cabral's ships was 179 out, and between 178 and 191 return. This became more or less the norm for the Portuguese: 180 days out, 200 return, and a total time of 500 days for the round trip. The fastest voyage out was 106 days, and return 130.62 In the seventeenth century the usual time for an outward voyage from Europe was 6–8 months, and the return 7–9 months. A very fast return trip was 11 months, but the usual return time was 16–19 months.

The speeds achieved varied with the monsoons and the skill of the crew. In the Mediterranean the best, and very exceptional, speed achieved was about 200 km a day.63 Ships racing before the monsoon did this regularly. Vasco da Gama sped from Malindi to Malabar in 1498 in 26 days, at an average speed of just under 200 km a day. In the next century the Dutch ships, which had begun to use the roaring 40s very early on, covered about 150 km a day.64

Life on board these ships ranged over great extremes, from boredom to savagery to danger. The accounts we have quoted, and many others, stress danger, drama, shipwrecks and so on, but the main aspects were tedium and the danger of disease. One traveller wrote that 'Certainly no one, to whom a house was offered, even if it was regally appointed, to live enclosed in it for six months, could remain so long detained and locked in it; much less in a ship, filled with so many and so varied inconveniences.'65 As to disease, it seems that there was a dim awareness that limes and lemons had some role in preventing scurvy, but even so this was a feared and loathsome disease which sometimes took a very heavy toll indeed. Victims died in excruciating pain, screaming in delirium. It affected the gums, so teeth fell out, or the legs, which swelled up with putrefying sores.66

It seems that social divisions were made much more visible, and even were exacerbated, during the months or weeks on board ship. Common sailors on the northern European ships were subject to extremely brutal discipline.

Nickolaus de Graaff, who did five voyages as a surgeon on VOC ships in the seventeenth century, wrote that

if the sailors are punished, they are flogged with a thick rope's end for so long before the mast, that they fall on their knees and beg for mercy; or they are ducked from the yardarm into the sea, or keel-hauled three times under the ship, and then flogged before the mast. Or they get a chain and ball on their leg, and must endure hard labour with the black slaves on the Company's public works. Or they are deported to the west coast of Sumatra, or to the Banda Islands, or to Mauritius, or else banished to Robben Island off the Cape of Good Hope. So that there are many ways of taming them; because they are not much better treated than slaves, and must stand ready at the beck and call of the most junior officer. 67

Problems with discipline no doubt increased as the quality of the crews and passengers declined. On VOC ships in the eighteenth century many on board were German beggars and paupers. On the Portuguese naus many of the troops on board had come straight from jail, dressed in rags, and suffering from syphilis and other diseases.

There was frequent overcrowding on the naus, a vast array of people travelling in extreme discomfort. But the elite, even if their cabins in the superstructure in the stern were narrow, with ceilings only four feet high, were still much better off than the rest of the passengers. In a previous chapter we found Ibn Battuta travelling in some style, complete with concubines and servants (see pages 111–12). Earlier in this chapter we saw the Abbé Carré in his voyage from Surat to Hurmuz travelling with very wealthy Persian merchants and their harems (see pages 182–3). So also Carletti, who as a wealthy merchant set off from Goa for Portugal in 1601. He had with him three servants, respectively a Japanese, a Korean and a Mozambique Negro. He had his own bedroom, and took one hundred hens with him to provide food along the way.68

Indeed food was the area where the social divisions were most obvious. On Portuguese ships the elite carried livestock on board for themselves: chickens, sheep and even cows. They also had dried fruits, almonds, preserves, wine, oil, sugared candies and cheeses. So also on VOC ships. William Hickey travelled in one and sat at the captain's table and gorged himself. For breakfast there was 'coffee, tea, as good rolls as were ever baked on shore, and what was more extraordinary, admirable fresh butter,

toast, eggs, ham, sausages, smoked beef rasped, and lastly an immense cheese.' All this was washed down with small beer and gin. The midday meal was much more substantial, and included fresh vegetables and fruit. Snacks between meals were also provided. The common folk, on the other hand, relied on what was provided, and it was very bad. Biscuit could be a year old when it was loaded, the dried fish was inedible and often had to be thrown out, the wine was rough, undrinkable stuff, and water was in very short supply. You

We can close this chapter with two accounts from the seventeenth century of life on board a Portuguese, and an Indian, ship. The first is based on Jesuit accounts. The fathers travelled in very cramped conditions, 'no more no less than sardines in a barrel.' Their cabin was so full of supplies and so small that they 'could neither stand nor sit; to enter [the cabin] it was necessary to drag one's body over barrels and crates, as snakes enter their holes.' The Jesuits, an enthusiastic and rigid new Order, were under a very strict regime, much more so presumably than the others on board. They were told not to spend time in their cabins, as these were unhealthy: rather they should walk around on deck. Clothes and cabins were to be washed frequently, and sheets changed at least every eight days. The food they took on board was very well chosen: water and wine to drink; cured meats, both hams and sausages, chicken, biscuits, dried fruits including figs and raisins, beans, cured olives, cheese, nuts and sweets like marmalade. This abundance meant that common passengers often begged food from the fathers. As is to be expected, they had an important religious role too. When the ship was in danger, or it was the feast day of the saint after whom the ship was named, they led processions around the decks. Apart from this they administered the sacraments and provided general spiritual counsel.71

Our Indian example is derived from an exemplary reconstruction by Professor A. Jan Qaisar, based on an important Persian text which describes a voyage to undertake the hajj. Some of the advice that the author, Qazvini, provides is very elementary. For example, the intending passengers should check the boat, and rely on omens too as to whether they will go on it or not. The ship should be neither small nor old, and its length must be greater than breadth. One also needs to check the masts and rigging, and find out whether or not the crew is industrious. Passengers had a choice of travelling

either on deck, or in a cabin, but in either case they had to provide their own food. In theory they were checked in and a list of them was kept by the nakhoda, though on Qazvini's ship there were meant to be 474 passengers, but another 40 appeared after the ship had sailed. Heavy cargo went in the hold, but passengers kept their personal luggage with them. Qazvini advises potential travellers to try and keep near the middle of the boat, near the main mast.

Water was provided for all, stored in big cisterns, but the wealthy brought their own too. Being a Muslim ship, this was not a matter of Hindu pollution problems but simply of accessibility and purity. A variety of food was brought on board. Common items were rice, ghee, dal, salt fish and butter, also smoked fish, breads, fruits and so on. Some better-off people took goats and fowls on board, which were slaughtered as needed. Eggs were preserved by being kept in finely ground salt. There is no mention of liquids like coffee, and nor of course of wine, but Qazvini does recommend tobacco smoking.

He also had some suggestions concerning health. He recommended that ships carry a doctor and a blood-letter. Apart from this he suggests some remedies, such as fruits and juice for those with a bilious humour from sea sickness, and for phlegmatics sweet things like honey and sugar. He does not mention scurvy, but we can assume that this was less of a problem on Indian ships because the voyages were shorter, and there were numerous stops where fresh provisions could be obtained. Life was quite pleasant on board. People studied, and held discussions on devotional and didactic matters. There were poetry recitals and music sessions, while some just relaxed in their harems, or gambled.72

Chapter 7

Britain and the ocean

These final chapters of my book cover the history of the ocean over the last 250 years. The treatment is sometimes topical, sometimes chronological. Most of this chapter is concerned with the nineteenth century, but some subjects will be dealt with well into the next century. Similarly, the last chapter is mostly about events in the twentieth century, but on occasion I have looked back to earlier times. Ideally these two chapters should be read as a single unit.

From around the middle of the eighteenth century a long process began which led over the next hundred years to a very dramatic change in the history of the ocean and its peoples. Over this comparatively short stretch of time people from outside the ocean took over most of the lands around the ocean, while the ocean itself became dominated by one naval power. Government policy and technological advances combined to undercut millennia-old indigenous maritime activities, with naval force always available as a back-up.

The foreign power in question is of course Britain (not 'England', for Scots were important participants). From being a relatively minor participant in Indian Ocean affairs even at 1700, the English East India Company (EIC) advanced dramatically and increasingly was backed by, and an arm of, the state. This was a state which guided, and benefited from, seismic changes in the home economy, the process which historians still refer to as the Industrial Revolution. Qualitative changes in productive techniques opened up, for the first time in world history, a pronounced gap between industrialised Europe, led at first by Britain, and the rest of the world. *Au fond* it was these immense advances in economic and technological matters which enabled Britain to establish an unprecedented control over the Indian Ocean.

There had been other European players in the Indian Ocean. Indeed, we noted that the Dutch East India Company (VOC) for a century or so did

much better than the English. The French made a charge in the eighteenth century, and fought a series of wars with the English. It may be that the relative success of Britain in the Seven Years War (1756-63) marks the beginning of their dominance: certainly in the Indian Ocean this was the period when the British began the long process of conquering India and taking over important choke points. The Dutch meanwhile were much reduced by the financial problems of the VOC. They lost the Cape colony to Britain at the end of the Napoleonic Wars, and then turned more to the internal development of Indonesia. As part of this, in the nineteenth century they slowly took over large numbers of these scattered islands, and especially in Java intensified forced agricultural production. Meanwhile the French sought compensation in Indo-China, establishing a sizeable colonial presence there during the nineteenth century. The islands of the ocean also changed hands in this period, a matter we will come to presently. The Portuguese were reduced to operating for a time in the entrails of the British system, making good money from the opium trade in the early nineteenth century. Goa endured an occupation by British forces during the Napoleonic wars.

The central fact was British dominance of the ocean, and indeed of oceanic matters worldwide for a time. In 1890 sixty-three per cent of the world's combined ship tonnage sailed under the British flag. By late in the eighteenth century this industrialising country had major centres in Mumbai, Kolkata, Chennai, Penang, and beyond the edge of the ocean in Sydney. Over the next fifty years a series of vital ports were taken or created: Colombo in 1796, Cape Town in 1806, Singapore in 1819, Aden in 1839, and beyond the ocean, Hong Kong in 1842. So unchallenged was Britain in the Indian Ocean that they needed little force to ensure their control, as compared with what was needed in more contested oceans. At the height of imperialism, in 1914, the Royal Navy had 39 ships in commission in the Atlantic, 43 in the Pacific, but needed only 12 in the Indian Ocean.1

This British dominance characterised the Indian Ocean in the nineteenth century, and some way into the twentieth. In the next chapter we will see a reassertion of littoral Indian Ocean states in the second half of the twentieth century and beyond. Two small specific examples will begin to introduce

the matter of British superiority. One is to see how European latecomers had perforce to operate in the interstices of the British system. In the early nineteenth century the various German states were left only with the crumbs, such as Siam, Zanzibar and Turkey. In 1846–48 a ship from the great port of Hamburg wandered the ocean looking for openings. It visited the Amirantes, the Seychelles, the Comoros, Massawa, Jiddah, Hodeida, Aden and Zanzibar, all to little effect. Things improved only after Germany was united, and acquired colonies in East Africa and the Pacific; these opened opportunities through and in the Indian Ocean.2 British dominance also acted to the detriment of those areas which remained independent for a time. For example, around 1800 Zanzibar could play off the British and the French, both of whom had a presence in East Africa and the islands. But once Britain had defeated France to end the Napoleonic Wars in 1815, the sultans had no choice but to become staunch, and subordinate, allies of the British. Zanzibar's sultans had to tailor their policies to suit their de facto masters.

This dominance in material and military matters often flowed over into a belief in cultural and moral superiority. English writers were quite open in their expressions of superiority over and, as the inverse, contempt for the natives, often coupled with a desire to uplift them. Mrs Tompsitt visited Colombo in 1884: 'The poor peoples' huts seem to be very devoid of what we should consider necessaries. They all sit and take their meals on the ground, yet they look good-tempered and happy. I expect what little cultivation and refinement they show is owing to contact with and the example of the English.'3

So also in high policy matters. George Curzon, whose rotund late-Victorian pronouncements will embellish several themes in this chapter, began his history of Persia by writing, 'I endeavour to trace the steps by which Persia has passed, and is still passing, from barbarism to civilisation, as she exchanges the slow beat of the Oriental pendulum for the whirr and crash of Western wheels'.4 Isabel Burton, wife of the famous explorer and self-publicist Richard, wrote in 1876 that a few Europeans had been killed in rioting in Jiddah in 1858. This was not good enough, and the European powers should have used the opportunity to strike out at oriental superstition. They

should have insisted upon Mecca being opened to the world, and upon all travellers being protected there as they are at Jerusalem and other 'Holy Cities.' It is high time that these obsolete obstructions to the march of civilisation should everywhere be swept away; the world will endure them no longer. Mecca is not only a great centre of religion and commerce; it is also the prime source of political intrigues, the very nest where plans of conquest and schemes of revenge upon the Infidel are hatched; and, as I have before said, the focus whence cholera is dispersed over the West. Shall a misplaced sentiment of tolerating intolerance allow her to work in the dark against humanity? Allah forbid it! 5

The broad sequence of the extension of British control sees at first the acquisition of a series of littoral bases, much like those acquired earlier by the Portuguese, and then the Dutch. Examples we have already noted are ports on the Indian coast, and Singapore, Aden and Cape Town. However, once the British economy made the transition from merchant capital to industrial capital, there was a need for control over the supply of raw materials for the new industries. Territorial acquisitions were the result. In terms of the schema we have been using (see page 114), the British now moved from controlling port cities, and then to having some influence over production, to the third stage of controlling territory and so the whole productive process.

The consequences of this extension of British control over large areas of land around the Indian Ocean have been much discussed. Our concern is with the maritime consequences of British dominance, but to set the scene we will provide a few suitable examples from India designed to show the broad impact on land. Arasaratnam's study of Coromandel in the later eighteenth century gets well the nexus between economic and political control. Cloth was the main product of coastal Coromandel, and the British were concerned to cut out competition from other purchasers, whether they be Indian or European. In the 1770s the English East India Company began to set up direct relations with the actual producers of cloth, the weavers. Middle men were cut out, and so the Indian version of the 'putting out' system was undercut as the EIC got closer to controlling and subordinating the weavers.

There was vigorous opposition from both the weavers and other would-be purchasers. However, as the area ruled or controlled by the EIC expanded, more and more coercion, some of it physical, was applied. Hand in hand

with these events in India, in Britain machine-made cloth was being produced with greater and greater efficiency. By the end of the story, in 1800, the EIC had done away with all European competitors. The position of the weavers was greatly reduced. So also with Indian financiers and merchants, who suffered from a confinement of the space in which they could operate, and ended up losing their autonomy, and becoming instead intermediaries between the producers and the EIC.

Further north, in Bengal, much the same thing happened once the EIC acquired the right to collect land revenue in this prosperous province in 1765. Now Bengal weavers had to fill the demands of the EIC before they could sell their cloth elsewhere, and the compulsory price the EIC paid was, in the words of an historian of this process, 'extraordinarily poor'. We see again in Bengal the nexus between political and economic control, for these cloth purchases were largely financed with the land revenue the EIC collected from Bengali peasants. The opium trade is another example. In 1773 the EIC took monopoly rights over this and from 1797 no private cultivation was allowed: each peasant had to cultivate a specified area of land, deliver his entire produce to EIC at a fixed price, and was penalised if the area cultivated fell short of what the EIC wanted.

On the other coast, in Gujarat, the advance of the British was slowed for a time by opposition from the Marathas, but once this ended in 1818 the result for merchants and weavers here was similar to what had occurred earlier on the east coast and interior. More generally, India as a colony was unable to protect its nascent industries. The contrast with the United States is revealing. Being independent, they were able to use government policy to get industries established to challenge the British. The American tariff on English woollen textiles was 35 per cent in 1828, and 50 per cent in 1832; and on some goods in 1842 it was 100 per cent *ad valorem*. Colonial India had no such option.

Maritime matters are our main concern. Before going into detail, a brief overview of the main themes which we will deal with in this chapter will help to set the scene. In the broadest terms what we are seeing is the creation of a world economy, and a consequent huge growth in transnational trade in the second half of the nineteenth century. International

trade grew seven times faster in this fifty years as compared with the first half of the century. In 1850 the world's merchant fleet had about 9 million tons of carrying capacity, by 1910 it had 34.5 million. In terms of volume per capita, international trade grew twenty-five times between 1850 and 1914.10 People from around the Indian Ocean participated in this world economy, but were subject much more than before to its vagaries. As one example, around 1850 India supplied about 20 per cent of England's raw cotton imports, much less than the United States. During the American Civil War India's exports boomed, and there was a speculative frenzy in Mumbai. The Civil War ended, the United States again exported cotton, and a series of major projects in Mumbai collapsed.11

The context of European dominance in the Indian Ocean was very different from what applied in the Atlantic and Pacific. These two oceans were more or less created by Europeans. As we have noted so often, this was very much not the case in our ocean. Rather there was a very old and elaborate existing system which had to be undercut and replaced. This was achieved. As just one example, in 1913–14 of the tonnage of India's overseas trade 72 per cent was British, and 64 per cent of India's exports came to Britain.12

Frank Broeze provided a very neat overview of the general impact of the west on the Indian Ocean:

the nature of the European intrusion [was] intensified by changes in maritime technology. Important aspects of this intensification were the use of larger iron vessels and steam power, the greatly increased volume of trade, the development of new forms of trade to meet the import and export requirements of industrialising Europe, and the unprecedented increase in the volume of passenger traffic both within the region and through it. 13

Three broad periods can be distinguished. The first is the era of the sailing ship, from 1750 to 1850, where locals still had a role, albeit a decreasing one and only in intra-oceanic trade; they had no role in connecting the Indian Ocean with other parts of the globe. In the next, from 1850 to 1945, the era of the steam and then the motorship, locals were slowly replaced and denied meaningful participation. A very marked hierarchy appeared, and the locals were left with only niche, small-scale, areas of operation. Many were reduced to menial employment on European ships. The period from 1945, to be covered in the next chapter, sees the arrival of the

specialised bulk carrier and container ship. In this period people from around the ocean come back to dominance. However, as ports developed to service these new ships, mechanisation and especially containerisation reduced dramatically the opportunities for unskilled labour.14

We have written many times of connections across and beyond the ocean. These now intensified. We will follow the distinction made by Horden and Purcell in their study of the Mediterranean, and distinguish between connections *in* the ocean and connections *of* the ocean. It will be remembered that they found 'a distinction between history *in* the Mediterranean – contingently so, not Mediterranean-wide, perhaps better seen as part of the larger history of either Christendom or Islam – and history *of* the Mediterranean – for the understanding of which a firm sense of place and a search for Mediterranean-wide comparisons are both vital.'15

What then of wider connections, going beyond the ocean, a history in the ocean? Indian railway sleepers were sometimes built using Baltic fir, which was creosoted in Britain, then shipped to India. From the 1830s cargoes of ice came to Mumbai from north America. On either side of 1800 whales and seals were hunted in the southern stretches of our ocean by European and American ships, and the products taken far outside the ocean. Seal furs were mostly sold in Guangzhou. Cowry shells from the Seychelles were used to buy slaves in West Africa, and even after the end of the slave trade they were used to about the mid nineteenth century as currency in the Bay of Bengal, and far afield in Timbuktu, Benin, and up and down the Niger river. In 1925 there was a large strike by seamen in Britain after ship owners, led by the reactionary Lord Inchape of the Peninsular and Oriental Steamship Company (P&O), cut their wages. The strike was vigorously supported by unionists in Australia, who provided strike pay for their English colleagues. Once the strike was over Lord Inchape decided to teach the unionists in Fremantle a lesson: for a while his ships boycotted western Australia and sailed direct to Melbourne.16

The history *of* the ocean, that is connections within it, are many and variegated: again a few examples will set the scene. Opium was cultivated in Bihar, in eastern India. Its role in the China trade in the nineteenth century is well known, but an earlier extensive trade to Java has been less

studied. The VOC monopolised this trade. In the 1670s they made less than 5,000 Spanish dollars from its sale, but in the 1720s they made 83,000 and nearly 2,000,000 in 1800.17 Another drug, tobacco, continued to be traded around and in the ocean, with the Philippines becoming a major production area during the nineteenth century. In the nineteenth century Kuwait imported all its water, and other necessities also travelled long distances across the ocean. As land was taken over for cash crops in Mauritius and Zanzibar, food had to be imported. Indian indentured labour in the former required imported rice, dhal and ghee from India, as did the free Indian population in the latter. Mozambique Island, just as in the past, imported food from along the Swahili coast, and even from India. Aden was taken by the British in 1839 and became an important hub in the imperial system. Livestock came from the Somali coast, grains from India, rice from Kolkata, and dates from the Gulf. Even leeches were traded far and wide. These were necessary for blood letting or phlebotomy, a very common medical specific in some European areas, especially France in the nineteenth century, and also in the Indian ayurvedic system. The main producer was the small French remnant in Pondicherry, and there was an extensive trade from there to Mauritius: their availability was widely advertised by pharmacies in Port Louis. One had them available by the thousand. In 1845 Fanny Parks was on her way back to England on the *Essex*. The ship's doctor had brought on board 10,000 leeches from Kolkata, as he knew there was a shortage at the Cape, and he could sell them for no less than half a crown a piece. He carried them in large earthen pots full of soft mud: alas, the pots broke in a storm and the sea water killed them all. Later in the century Indian labour was taken to the Caribbean, and on the transport ships 100 leeches had to be carried for each 100 labourers. 18

We have examples here of new British possessions opening up new or more intensive connections across the ocean. This applies particularly to connections with the new colonies in Australia, something often ignored by Australian historians who concentrate on ties with the 'mother country'. The first colony, New South Wales, quickly developed extensive ties with India. The first ship from India arrived in Sydney in 1793 with a cargo of stores, livestock and provisions. Four others came in 1794–95 with food. Between 1808 and 1825 no less than ninety India ships came to New South Wales. In

1829 a colony was founded on the western Australian coast, at Perth, and in its first year a ship was sent to Java for food supplies. From the 1840s there were close connections between Mauritius, where the sugar industry was flourishing, and the nascent industry in eastern Australia.

Two particular products provided exports from the Australian colonies to India. India has never been a particularly good place to breed horses. In the nineteenth century in western Australia a new town was set up to breed horses for the Indian market. Its appropriate name was Australiad. This project failed, but the eastern colonies for long provided the bulk of the horses used by the Indian army. This trade began in the 1830s and continued for nearly a century. From the late nineteenth century the Indian army depended almost entirely on the again appropriately named 'Walers', though not all of them came from New South Wales. The trade was at its height in the second decade of the twentieth century, thanks to the demands of World War I. In this decade 59,000 were sent from Queensland, 21,000 from Victoria, 19,000 from New South Wales, and 12,000 from South Australia. Western Australia also provided an alternative to Baltic fir for use as railway sleepers: in the later nineteenth century there was a significant export of karri and jarrah timber.

We are seeing in all this widespread connections between parts of the British empire scattered all around the shores of the ocean, and in some cases going far inland. I have concentrated on connections to and from India, and for a very good reason. It was India which was the fulcrum of the ocean, both at this time and earlier and later, and consequently I have had to privilege the subcontinent. This was writ large during the nineteenth century, when India was indeed the jewel in the British imperial crown: the only place of which Victoria became Empress was India.

The great proconsul George Curzon put forward a vigorous late-Victorian statement of the centrality of India:

Without India the British Empire could not exist. The possession of India is the inalienable badge of sovereignty in the eastern hemisphere. Since India was known its masters have been lords of half the world. The impulse that drew an Alexander, a Timur, and a Baber eastwards to the Indus was the same that in the sixteenth century gave the Portuguese that brief lease of sovereignty whose outworn shibboleths they have ever since continued to mumble; that early in the last century made a Shah of

Persia for ten years the arbiter of the East; that all but gave to France the empire which stouter hearts and a more propitious star have conferred upon our own people; that to this day stirs the ambition and quickens the pulses of the Colossus of the North [Russia]. 20

The possession of India was vital not only in symbolic terms, but also for hard economics. As Pope vividly points out,

the health of the British imperial structure relied to a great extent on India's commercial relations with the world. Britain's trade deficit with Europe and America was balanced by India's trade surplus with the world economy, giving Britain positive balance of payment figures overall. This accounting relied on the ability of India to export produce....

Australia played a role here too, for the discovery of gold in the 1850s meant that this could now flow, in an intraimperial fashion, to India to finance the exports of Indian produce which before had necessitated sending gold from Britain. This situation continued into the twentieth century. Indian exports by 1910 were covering up to 50 per cent of Britain's trade deficit. During World War I Britain had a major problem. To cover the importation of American goods they had to keep gold stocks in London. However, gold was also needed in India to finance sending war materials to Britain. The British used their very widespread imperial connections to collect gold from many places: Japan, India, Hong Kong and South Africa, and also Australia. The bullion was minted into sovereigns in Australia and sent to India.21

From about the end of the Seven Years War, in 1763, Britain faced no major challenge to her naval dominance in the ocean. The only remaining threat was 'piracy'. We noted earlier that it is not a simple matter to say who is a pirate, and who is an auxiliary of an established 'state' (see pages 126–7). As Mitchell noted perceptively, 'The same person might well be trader, fisherman, pirate and naval employee by turns.'22 Even at the start of our period the situation concerning Europeans was still blurry. During the French revolutionary wars British naval forces in the Indian Ocean were stretched thin on occasion. The enemies who did best in this situation were not the official French frigates, but rather the more or less sanctioned privateers. The authorities in French Mauritius licensed twenty-five such

privateers, and between 1793 and 1802 they took 200 prizes, while official frigates took only forty.23

Early in our period European ships were still at risk from pirates, as Earl found in 1832. One pirate in Indonesia had a prahu with 150 men and several large guns.

The pirates who infest the Archipelago consist wholly of the inhabitants of the free Mahommedan states in Sumatra, Lingin, Borneo, Magindano, and Sulu; those natives who have remained uncontaminated by the detestable doctrines of the Arabs never being known to engage in the like pursuits. The Europeans who are unfortunate enough to fall into their hands are generally murdered, while the natives who compose the crews of the captured vessels are sold for slaves. 24

So also off the west coast of India, where the Angrias and Sidis in the late eighteenth century sometimes gave as good as they got when confronted by EIC craft. However, as European ships evolved into iron and steel monsters, a process we will cover in detail presently, their ships became less vulnerable. The Europeans could use steam gunboats, and exchange information using the electric telegraph. Now it was only local ships which were under threat.

The Europeans pursued a carefully graduated policy on this matter. Essentially they defined who were their allies or clients, and protected their ships, and indeed sometimes turned a blind eye to nefarious activities from such client states. It was the enemies of the clients who were subject to attack. This was well articulated by the leader of a 'pirates" stronghold in Kathiawad, western India, in 1807. He lugubriously told the British, 'In these days, all merchants have taken to the flag and protection of the Honourable Company, and if I abstain from plundering them, where can I procure food, and if I continue I fall under the displeasure of the Company.'25 Similar discriminatory policies were pursued by the Dutch and English in the Malay world, and by the Spanish in the Philippines, but I have chosen to use as a case study the British attack on what they defined as piracy in the Gulf in the early nineteenth century.

The people concerned were the Qawasim, a confederation of tribes who lived in al-Sir province, now part of the United Arab Emirates. Their main port was Ra's al-Khayma, north of Muscat, but they also controlled Sharja

and, on the other side of the gulf, Linga. This grouping was in competition with Oman, further down the gulf. Early in the nineteenth century they even attacked EIC and Royal Navy ships with their formidable fleet of about sixty larger ships, several hundred smaller ones, and some 20,000 men.26 By the second decade of the nineteenth century the British were becoming seriously concerned. There were economic matters: the Qawasim were hindering trade in the Gulf, or so they claimed, and competing quite successfully in trade between India and the Gulf. Nevertheless, Mumbai's trade with the Gulf actually rose threefold in the first twenty years of the century, which seems to make the hindering trade argument rather specious. Politics also played a part here. The British were becoming closer to Oman, with its valuable dependency of Zanzibar, under Sayyid Sultan. The British defined one party to a rivalry between two indigenous Gulf states as pirates, and acted accordingly. As Philip Francis said at the time in the House of Commons, 'whenever the Governor General and Council (of India) were disposed to make war upon their neighbours they could at all times fabricate a case to suit their purpose.'27

Ra's al-Khayma was stormed and taken in December 1819, and a victor's peace imposed next month. Sayyid Said of Oman, who ruled from 1804 to 1856 (he moved to Zanzibar in 1832), had helped the British and now was rewarded. Oman received privileged treatment in the General Treaty of Peace of 1820. All Gulf traders were now to be subject to the new order. Friendly Arab ships had to carry a register setting out where they were going, how big the ships were, and how many arms they carried. This register, eerily reminiscent of the Portuguese cartaz of the sixteenth century, was to be produced on demand to any British ship that they came across. 28 'Unfriendly' ships were confiscated.

The always quotable George Curzon explained what had happened. The situation in the Gulf was anarchical in the early nineteenth century.

Arab corsairs desolated its shores and swept its water with piratical flotillas; slave-hunting flourished; and security either of trade or dominion there was none. The hands by which this long-standing anarchy was subdued are also those by which present differences are composed, and maritime peace assured that is one of the most successful achievements of practical statesmanship. The pacification of the Persian Gulf in the past and the maintenance of the status quo are the

exclusive work of this country; and the British Resident at Bushire is to this hour the umpire to whom all parties appeal, and who has by treaties been instrusted with the duty of preserving the peace of the waters.29

He refers here to the way in which what the British called the Pirate Coast was transformed into the Trucial States, by which the various 'states' and tribal confederations of the Gulf were brought under British hegemony by means of signing 'truces'. These states were required to end the slave trade by sea, and to refrain from acting as 'irresponsible buccaneers' at sea. However, crucially, Curzon was quite clear that what happened inland was of no concern to Britain: its only interest was to safeguard trade.

The truce has not prevented, it was neither designed nor expected to prevent, warfare by land. These petty tribes exist for little else but internecine squabble, blood-feuds, puny forays, and isolated acts of outrage or revenge. With their internal relations Great Britain, who claims no suzerainty over Arabia, would have been foolish to interfere. All that she took upon herself to do was to secure the maritime peace of the Gulf....30

This modulated approach to the area continued in force until oil entered the picture in the twentieth century.

Curzon is describing here one part of the way in which Europeans, and especially the British, were able to control the Indian Ocean. Steam ships, the Suez Canal and better ports were most important, but there also was the matter of mapping the ocean. It would be easy to assume that once John Harrison produced a chronometer in the 1770s which could be used to work out longitude there were no more problems, and European ships could navigate secure in the knowledge that they knew exactly where they were. In reality it was decades before even western ships achieved this sort of certainty. In 1786 Mrs Fay's ship was running short of provisions, but the captain said this was no problem, as they were near St Helena, where food could be obtained. Alas, it turned out they were still off the East African coast. Right up to 1817, thanks to various errors and careless map-making, there appeared on standard charts of the Indian Ocean a fictitious island at about 28° S and 74° E, which in reality did not exist at all.31 Well into the nineteenth century European sailors, just like their Arab predecessors, hoped to sight a known land or island in order to check their location. One example was St Paul and Amsterdam islands at 77° E and 37–38° S. These

marked where ships using the roaring 40s either turned north to India, or kept on going east to Australia. They were used as such up to the 1860s by sailing vessels. But about this time improved navigation methods meant that ships bound for the Australian gold rushes now went further south to take full advantage of the roaring 40s.32

Certainly navigation and map-making improved dramatically in the nineteenth century, so that in the terms used by Edward Said the Indian Ocean was constructed and 'known' by foreigners: knowledge and power coexisted in a symbiotic relationship. The British spent much time and effort on making accurate charts. Captain William Owen on behalf of the British Admiralty spent an arduous five years, 1821–26, in two ships charting the East African coast. The results of these and other expeditions were published in the many Admiralty Guides which are one illustration of the technological superiority of the Europeans at this time. Here and elsewhere they was a strong connection between this advance and the displacement of local traders and ships. In the case of the maps and guides, they obviously made navigation safer for those who could use them, which obviously was mostly Europeans. Local craft seldom had anyone on board who could read them, and also did not have the navigational equipment needed to take advantage of their directions.

These charts and books were one way in which Europeans were able to overcome or at least ameliorate the effects of the deep structure elements I outlined in the first chapter of this book. Many of them no longer acted as iron constraints on what ships and people could do at sea. The monsoons, a strait jacket for millennia, now became largely irrelevant when confronted by steam ships. Poor harbours, or no harbours at all, were overcome by British engineers. Even distance was transformed by steam ships and the Suez Canal. As a capsule example, consider that even in the 1830s a return voyage from England to India took two years. By the 1850s steamers had cut this down to two to three months, and communication within a day became possible with the telegraph in the 1870s.

We have written extensively in previous chapters about the perils and risks associated with wind-propelled ships. Ships of whatever size which depended on the wind had obvious disadvantages, at least in economic

terms, if not in aesthetic. They needed very large crews, so that the dhows of the western ocean were often overcrowded with crew, passengers, and traders all mixed together in each other's way, and indeed the distinction between the three was by no means clear cut.

In the first half of the nineteenth century there was considerable variation around the ocean. In some areas, such as in the Gulf and off southern Arabia, local ships did well. In other areas a pronounced dualism developed at this time, and this is before the major impact of steam ships. British sailing ships dominated long-distance trade,

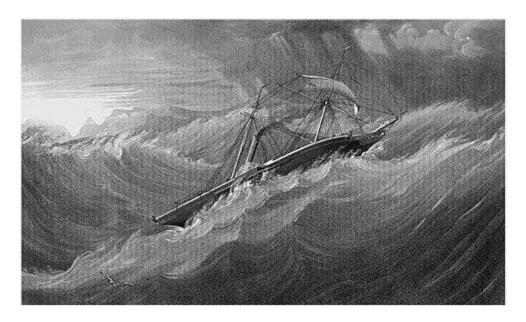


Figure 4 The Honourable East India Company's iron war steamer, the Ship *Nemesis*, scudding before a heavy gale off the Cape of Good Hope on her passage from England to China. Produced by W.J. Leatham (artist) and R.G. Reeve (engraver), 26 October 1841. © National Maritime Museum, London

and also high-value shorter distances. They were advantaged by their access to modern navigation techniques, and also by the way the greatest traders, the EIC and the private European traders, used only European-type ships owned by Europeans. All this was writ large once steam came in.

We have noticed several times that European ships had certain advantages over local craft. In the sixteenth century they were sturdier, held together with nails so that they could survive Atlantic storms. This also meant they could carry cannon. Increasingly local shippers preferred to use European ships, partly as they were technologically superior, partly as they were less vulnerable to pirates. The improvements in navigation also helped, as did experiments from the 1760s with copper sheathing over the hulls, which countered the effects of tropical parasites. But it was the use of steam power to drive the ships which was the really important, qualitative, innovation.

Steam engines were the driving force behind the process of industrialisation in England. First used to pump water, and then to drive machinery, in the early part of the nineteenth century they were used to provide locomotion, first on land and then at sea. Steam assisted ships developed early in the century, though regular steamer passages across the Atlantic began only in 1838.33 The very first steamboat in India was a small pleasure craft built for the Nawab of Oudh in 1819, and indeed the first regular use of steamers in India was on the Ganga river. In 1821–22 the British built two steam tugs to tow ships to Kolkata, and they used primitive gunboats, steam driven shallow draft vessels, in the first Burma War of 1824–26. From 1828 iron clad steam vessels were used on the Ganga to tow strings of accommodation boats, and barges with freight. They provided an early illustration of the superiority of steam, for they towed their barges the 780 miles from Kolkata to Allahabad in three weeks, instead of the three months taken by country boats.34 Yet there were problems also. They were very expensive to run, and had difficulty getting up to Allahabad, let alone any further, due to variable shoals in the river. In 1837 the stately Lord Auckland was Governor General. He and his sisters were towed up the Ganga with a vast entourage in a string of 'flats', or large barges. However, there were constant problems with the shallow water, so that the steamer kept running aground even though this was October when the river should have been quite high.35 Steamers on rivers were of no use in the south, where there are no rivers navigable for any distance, and on the other great river of the north, the Indus, there were other problems. Essentially there was a technological trap, in that steamers powerful enough to cope with the strong currents were too heavy to get over the shoals in the river. The advent of railways soon made these river steamers redundant. Nevertheless, they did illustrate a wider facet, which is steam as western dominance writ large. A British passenger on a Ganga steamer in a novel of 1852 said that

there was an 'inconceivable separation... between us few English, silently making a servant of the Ganges with our steam-engine and paddle-boats, and those Asiatics with shouts and screams worshipping the same river.'36

On the high seas the first steamer to be seen in Mumbai arrived in 1820, in Kolkata in 1823, and in Batavia, Semarang and Surabaya in 1825. The first steam-assisted ship to reach India from England seems to have been a small paddle steamer which arrived in Kolkata from Falmouth in 1825 after a passage of 113 days. Next year the new Governor General, Lord Bentinck, arrived in a steam boat. A steam boat was used in the first opium war in 1840, and in the same year the famous P&O Company was reorganised and two years later started regular sailings linking Suez, Aden, Ceylon, Chennai and Kolkata. In 1852 this company took over from the EIC the Suez–Mumbai route, one which became its most famous and most profitable. In this same year a regular service to far away Sydney was begun.

These early steamers were not the efficient behemoths of the late nineteenth century. They were small, dirty, inefficient and expensive. Many of them still used sail when the winds were favourable, relying on steam only in cases of necessity. In 1867 Captain Sulivan was in the Royal Navy sloop *Daphne*. The ship struck a gale as it entered the Indian Ocean past the Cape of Good Hope. An officer fell overboard, but the ship was unable to go back to pick him up, as even though 'the fires were lighted with the view of using steam if possible, but it could not be up for nearly two hours.'37

The early steamers with single combustion engines required vast amounts of coal. They carried as much as they could, but this meant that they were limited to carrying only mail and passengers, there being no room for freight. In 1856 Ida Pfeiffer went from the Cape to Mauritius in a new steamer, of 150 horse power. It cost a massive £500 a month to run, not counting the cost of coal, which was very considerable. The ship gobbled up more than a ton every hour, yet coal cost £2/10s a ton at the Cape.38 This steamer was relatively efficient, for some of the early steamers used up to 50 tons of coal a day. The consequence was frequent stops at places on the way — Cape Town, Aden, Galle — to pick up coal. In the 1850s Galle imported 50,000 tons of coal a year, most of it coming from far-away Cardiff. In these early days much of the coal was taken to these depots

strung around the Indian Ocean in sailing ships, thereby demonstrating that this was still an age where steam and sail were reciprocal and indeed needed each other. In 1857 only one-third of all the ships which called at Sri Lanka were steam driven, and these carried only mail and passengers. 39

Nevertheless, even at this time steam did offer predicability and faster and cheaper passages. Even in the 1850s one could travel from England to Mumbai, going overland through Egypt to reach Suez, for as little as £105, while the Cape route cost £1,000, and the Egypt route with sailing ships £350.40 Two factors acted to ensure the triumph of steam: government assistance, and further technological innovation. We will look at the matter of subsidies first.

Why did an ostensibly laissez-faire English government provide subsidies? Sir Charles Wood, the Secretary of State for India in 1866, put it in a nutshell: 'Increased postal communications with India implies increased relations with that country, increased commerce, increased investment of English capital, increased settlement of energetic middle-class Englishmen; and from all these sources, the wealth and prosperity of England... are greatly increased.'41

Britain already had naval dominance in the Indian Ocean after 1815. As the empire expanded over the century, it was essential to have means of regular communications between its different parts, so that trade could flourish, security be enhanced, and troops and war material be moved as needed. The device used to ensure this was mail contracts. British steamship lines, preeminently P&O, were given large subsidies to carry mail from one British colonial port to another. This in turn ensured the existence of a large merchant marine. The ramifications are obvious. A large merchant marine meant a reserve army of trained seamen who could be used in naval ships in time of war. Indeed, the merchant ships themselves could act as troop carriers. Troops from one part of the empire could be moved to conquer another area. The British shipbuilding industry was in effect subsidised at one remove.

The actual subsidies were paid by the Admiralty, and later the Post Office. The first was to the EIC in 1835 to provide a mail service between Suez and India. The P&O line was formed in 1840, and immediately got a contract to

take mail to Egypt. Later it got subsidies for the longest blue water routes in the Indian Ocean. The subsidies even continued after steamships became more efficient and able to carry cargo at a profit. Later in the century they were still there, now being used to ward off competition from German, French and Dutch quasi-government lines.

Very large sums were involved. Between 1840 and 1867 the contracts yielded £4.5 million, and £6 million between 1868 and 1890. Overall the support given by the British government was about 25 per cent of the total capital. For the P&O line in the period 1840–80 the subsidy made up 29 per cent of operating costs, and 28.5 per cent of total receipts. These were then reduced, so between 1880 and 1914 the respective proportions were 18.8 per cent and 15.7 per cent. Even later, in the early twentieth century when subsidies had been reduced, P&O still got a grant for the India, China and Australia mails of £330,000. The P&O line also did well out of carrying bullion: in a good year over £200,000.42 Another lucrative low-volume, high-value cargo up to 1870 was opium, which had to be carried secretly to avoid complaints from moralists. Subsidies to P&O continued long after other British lines had been left to stand on their own and face competition. This was because it served the heartland of the empire, the fulcrum of the Indian Ocean, India, and so for prestige reasons had to be helped well into the twentieth century.

P&O was joined in the commanding heights of long-distance prestige routes across the Indian Ocean by the French competitor Messageries Imperiales, which also operated on more local routes, as also did the Dutch entrant, KPM (Koninklijke Paketvaart Maatschappij). These rivals had to face competition on the high seas from P&O, and on local routes from the very successful British India Steam Navigation Company (BI), which essentially operated branch lines and smaller local routes feeding into P&O. Its steamers plied between islands, and up and down rivers, as well as on the coasts of the high seas. It was controlled by Scottish interests led by William Mackinnon.

BI was therefore an Indian variant of the predominant pattern of steamshipping enterprise in the Indian Ocean during the 1850s and 1860s, in which guaranteed income from the carriage of mails

and the regularity of scheduled services demanded by postal contracts supplied the financial and operational underpinnings of the liner trades.

The close government—commercial nexus was well seen in the way that when BI first started sailing from Mumbai to Basra in the late 1860s, their agent in Basra was also the official British government representative there. Their steamers were routinely used by the Indian government to transport troops; nine were used to take troops to Abyssinian in 1867–68. Like P&O, its subsidies from government were what kept it going. Between 1864 and 1870 the firm was, if one subtracts the mail subsidies, profitable in only one year.43

In the Gulf British interests had been dominant since the defeat of the Qawasim 'pirates' in 1819. When a mail subsidy for this area was opened for tenders in 1862, two Indian-owned firms were unsuccessful: BI won, at least in part as it was British, and so could be better relied on to serve wider imperial interests. BI steamers connected Mumbai with Muscat, Bandar Abbas, Bushire, Bahrain later, and Basra. There was even a Basra Club, for British expatriates. Here BI ships linked with those of another British owned concern, the Euphrates and Tigris Steam Navigation Company, which went upriver from Basra to Baghdad.44

Other Europeans were forced to operate in the interstices of the British system. KPM, founded in 1888, was explicitly designed to challenge British dominance It did very well in Indonesia, even to the extent of ousting Singapore as the main hub for local, but not long-distance, trade. This also was very much a Tool of Empire. It helped extend Dutch authority over the remote islands of Indonesia, transported troops, and in return was heavily subsidised by the Dutch government. Its lines extended to China and Japan, to Bengal, Australia and Thailand.

BI was always closely tied to government, and indeed it has been claimed that Mackinnon, its driving force until his death in 1893, was as important in the expansion of the empire in East Africa as were the political and military leaders. He was a dominant figure not only in BI but also in the colony-promoting Imperial British East Africa Company (IBEAC). His groups had 108 ships in 1882. He was intricately involved with the career of Sir Bartle Frere, first as a member of the viceroy's council, and

then as Governor of Mumbai in the 1860s, provided crucial support as BI established itself in the Arabian Sea, and, in a quite modern way, Frere and his family and friends also invested in BI. He also had close ties with J.W. Kaye, the Secretary of the Political and Secret Department at the India Office. On one occasion Kaye got a box of grouse and a chest of tea from Mackinnon. He visited the magnate's Scottish estate, and Mackinnon acted as co-security on a loan for Kaye. In return Kaye helped Mackinnon and his various companies win government contracts and receive other government favours. Another client, Euan-Smith, was a member of the Frere mission of 1872–73. He advised Mackinnon and was lent money in return. An English consul in Zanzibar, John Kirk, retired from the Foreign Office in 1887 and became a director of IBEAC. BI was also successful in getting mail contracts from the Portuguese to link the remnants of their empire. However, by the 1880s BI was faced with competition from German lines in East Africa, and also from the French Messageries Maritimes, which got a subsidy of about £60,000 a year to compete with BI on the Aden-Zanzibar route, and also on that going Aden–Karachi–Mumbai.45

If it was hard for other Europeans to compete with these British lines, it was nigh impossible for local financiers. We noted that two Indian firms tendered unsuccessfully to take mail to the Gulf. In all cases, local people did not have access to the higher echelons of government which people like Mackinnon had and used so ruthlessly. From the 1880s Japan imitated the west and established a similarly close nexus between government and industry: this was not possible for European colonies. The career of the Bombay and Persia Steam Navigation Company, founded by a group of Mumbai Muslims in 1877 to service the hajj trade, is instructive here. One consequence was that the traditional sailing ships lost this route too, the only long-distance one left to them. This line was later renamed the Mogul Line, and in 1913 came under British ownership and effectively was controlled by BI. So also later, when the Scindia Line in India, well financed and run, was, thanks to pressure from BI, restricted to coastal trade.46 The dominance of the established lines, especially the British ones, was further reinforced by the Conference system, essentially a cartel which was prepared to cut rates mercilessly to send any outsider bankrupt. An

example was a firm established in 1884 in Western Australia to challenge the two dominant lines sailing to this new colony.

A freight war ensued, with rates per ton going from 40/- down to 10/-. Finally the upstart caved in and joined the conference: predictably, rates then went up again. Assam tea planters at about this time similarly failed to challenge the conference system.47

Government help, then, was one reason for the triumph of steam in the second half of the nineteenth century. The other one was important technological innovations, which made steam ships much more efficient. From 1838 the screw propeller began to supersede paddle wheels and after 1850 iron replaced wood in the construction of the ships. The most important breakthrough was the development of the compound steam engine in the 1860s, which used the same steam twice, thus cutting down on the amount of coal needed. These engines also could sustain much higher pounds per square inch pressure. Innovation continued: steel began to replace iron in the late 1870s, and by the 1890s the triple expansion engine, which worked at 200 p.s.i., was being used. Early in the next century steam turbine engines and diesel engines appeared, making another important break. The size of the steamers consequently rose: in 1867 the P&O ship *Sumatra* was 2,022 GRT, but by 1911 the *Maloja* was a monster of 12,340.48

One important result of these developments was that less coal was needed. In the early days steamers hopped from one coaling station to another, but these stops progressively became less frequent. In 1884 a passenger described how his steamer took on coal at Port Said, and then sailed nonstop to Western Australia; though the ship sailed less well as the voyage progressed, for the coal had acted as ballast.49 The steamers could now profitably carry cargo as well as mail and people. Regular cargo voyages began in the ocean in 1866. As we will see, this did not apply to bulk cargoes for some time yet, but most other cargo was carried on the predictable and reliable steam ships. One other innovative helped here, of benefit especially to the settlement colonies of South Africa and Australasia. This was refrigeration. In 1880 the first cargo of frozen

Australian mutton was landed in London in prime condition. Soon after, butter and fruit were taken too. 50

The greatest advantage of the modern steamers was that they were able, to a very large extent, to conquer nature. They promised regular passages, unaffected by the monsoons which for so many millennia had acted as a strait jacket on Indian Ocean sailing. True that this took a while to achieve. In the early days of steam, in the late 1840s, P&O promised, on pain of being fined, to do the Suez to Kolkata voyage in 523 hours, and the return one in 543. However, during the monsoons of May to July 120 hours had to be added. But soon the monsoon became irrelevant. On the run to Australia, P&O ships left London every other Friday in 1913, that is with the Suez Canal being used. The voyage to Fremantle was precisely 32 days, and to Sydney 41. One could avoid the Bay of Biscay and go to Marseilles by train. The train left London at 11.00 a.m. on Thursday, got to Marseilles at exactly 7.10 a.m. on Friday, and the boat sailed at 10.00 a.m. BI ships were soon able to ignore the dreaded southwest monsoon off the west coast of India. From 1863 the line operated a routine service from Kolkata to Mumbai. Ships left both ports on the 1st and 15th of each month, and called at fourteen regular ports, and others by request, during the three-week journey.51 One much noted consequence of this routine and efficiency was the way in which it made the voyage from the metropole to India much easier. Consequently English women could join their husbands in India, go home for holidays, and send their children back to school in England. It is claimed that this reduced any chance that the English rulers of India would be indigenised in the way previous rulers from outside had been, for a return home was now easy.

Yet we must not give a picture of total efficiency, with sea passages being as routine, sterile, and boring as those on a modern cruise ship. Colin MacKenzie was on SS *Merkara* in 1890. Typically even for this time, the ship had some sails also. After a dreary and hot passage through the Suez Canal they took on coal at Aden, so much that in order for them to be able to go direct to Batavia some of it was piled up on the deck at first.52 His ship, and many others, carried livestock which was slaughtered as needed to meet the British propensity for large meat meals. Royal Navy ships also did this. In 1850 a 36-gun ship cruising off the African coast to catch slave

ships took on twenty or thirty bullocks, sheep, pigs and so on in Zanzibar, 'which made our main deck appear more like a farm-yard than a battery' At one time they had 'as many as fifty bullocks between the guns on the main deck, besides sheep &c.'53 Even the stately P&O ships had a barnyard aspect to them, for fodder had to be carried for the animals, and passengers woke to the crowing of cocks, cackle of geese, bleating of sheep, squealing of pigs, and lowing of cows. The steamers were dirty ships, belching out smoke and cinders. If the wind was a following one, the smoke went straight up and then dropped smut and cinders on the deck: the only relief was for the captain to turn the boat around for a time and get a good, sweeping through-draught.54 Loading the coal was a rather premodern activity, as Tompsitt found in Port Said in 1884. She wrote, in Orientalist vein,

I went to see the men bringing in the coals. I hardly know how to describe them unless I say they looked like imps of the old gentleman. They were black men, and they seemed to have only a sack on; naked legs, feet, and arms, and covered with coal dust. They brought the coals from the barge to the ship over a steep plank in rather small baskets, and they hurried to and fro and made such a dust that they were in a perfect cloud, yet they were evidently in high glee, judging by the way they skipped over the planks singing, laughing, and making as much noise as they could; if they had slipped, they would have fallen in the water. I thought it a good example of contentment. 55

The scenes on the feeder routes in the Indian Ocean were even less sanitised. George Curzon wrote, as usual vividly, as usual in Orientalist tones, of the Gulf steamers:

The fore deck of a Gulf steamer presents one of the most curious spectacles that can be imagined . . . men lying, sitting, squatting, singing, chattering, cooking, eating, sleeping; and all in the midst of a piled labyrinth of quilts, and carpets, and boxes, of sailcloths and ropes, of sheep, and birds in cages, and fowls in coops, of trays, and samovars, and cooking-pots, of greasy donkey-engines and clanking chains – surely a more curious study in polyglot or polychrome could not well be conceived. 56

Curzon is describing 'Asians' using a western means of transport, and this introduces the matter of what was happening to local craft as the steamers expanded. What eventuated was a pronounced dualism. We noted how it was near-impossible for locals to compete in the commanding heights of steam transport, but sailing ships for a time were able to continue on coastal

routes. They carried some goods which were unloaded in the major ports onto the steamers, but they also carried low-value goods up and down the coasts and rivers. However, late in the century their role was increasingly undermined by tramp steamers, European owned and tramping from one port to another rather like the pedlars of previous eras. The characteristic dualism was well seen in the Gulf around 1900. Iraqi dates for America, Australia and East Africa were taken in steamers from Basra, while those for southern Arabia went in dhows. Indian luxury imports to the Gulf, such as textiles, arrived in steamers, but bulk goods like tiles and timber in dhows.57 In Indonesia proa or prau had, and still have, some role. In 1910 the average carrying capacity of a steamer was 3,200 cubic metres, of a native rigged proa 28 cubic metres. Steamers carried 90 per cent of total cargo, yet even so proas were still viable, feeding in to steamer routes. 58 So also in East Africa, where dhows went to minor ports that steamers could not or did not visit, such as Lamu, Shihr, Mukalla. The mangrove trade to the Hadhramaut, Kuwait and Oman, a very important one, was for long carried in dhows. Alan Villiers left a vivid account of just such a voyage. Similarly, dhows brought both goods and passengers to large ports like Mombasa, where they were trans-shipped to steamers. Indeed, it could be that steamers created new routes, and markets, and that the overall expansion of trade which we noted earlier was of benefit to traditional craft as well as steamers, or at least that the crumbs left to them meant that they continued, and still continue, to have some role.

On the high seas it was huge barques carrying bulk cargoes which held out for a time, and these were owned by Europeans. The wool trade from Australia to England via the Cape or Cape Horn was done in sail to the end of the nineteenth century, but it collapsed soon after and was replaced by steam. These were not the more famous clipper ships which carried tea from China. Villiers scorned these as 'lightly loaded kite-filled clippers', while of the great four-masted barques sailing via Cape Horn he wrote, 'Among man's working creations for the carriage of his goods, they alone were supremely beautiful.'59 Eric Newby left a vivid account of the end of this era in 1938–39. He was in a four-masted barque owned by Gustav Erikson of Finland, who during the depression bought these great ships cheap, perhaps only about £4,000 each, and for a time could make a profit

from them thanks in part to very small crews, and these abysmally treated. On Newby's ship, the *Moshulu*, the main mast was 200 feet high, and it was 5,300 tons dead weight. It is a sad sign of the transition that when the ship reached the Spencer Gulf to take on a cargo of wheat for Europe, they found that steamers had already taken all the grain available for export. 60

The end of sail was lamented by men like Newby and Villiers, and earlier by Joseph Conrad. He thought that steamers constituted 'a disdainful ignoring of the sea'. 61 In 1922 Villiers served on a steamer. He hated it. Apart from the fact that this was an Australian ship and so heavily unionised, which he did not appreciate, he thought the ship looked 'a clumsy lump'. The work was boring and repetitive, so that being a seaman on it was 'merely another form of labouring'. 62

Villiers was quite right. The modern age had altered profoundly the role of men working on ships. This went back before the age of steam. In the late eighteenth century on British ships the regime became more organised and bureaucratic. This applied particularly to the 'native' crew, known as lascars. The Asiatic Articles passed by the British Parliament aimed to provide cheap labour on British ships but ensure that the lascars could not settle in England. The result was that lascar wages ended up as low as one-fifth of those of English seamen. They were recruited for a set number of years, rather than for the duration of a voyage. The results for the owners were excellent. The lascars could not desert. They were considered to be intrinsically preferable, as they did not drink, and it seemed obvious that, being orientals, they were much better at working in the incredibly hot engine rooms of the steamers. Mark Twain left a somewhat idealised depiction of them. He left Sydney on the P&O ship *Oceana* in December 1895 bound for Sri Lanka.

A lascar crew mans this ship – the first I have seen. White cotton petticoat and pants; barefoot; red shawl for belt; straw cap, brimless, on head, with red scarf wound around it; complexion a rich deep brown; short straight black hair; whiskers fine and silky; lustrous and intensely black. Mild, good faces; willing and obedient people; capable too; but are said to go into hopeless panics when there is danger. They are from Bombay and the coast thereabouts. 64 On this and other ships there was a strict colour line determining who worked where.

Steam meant that all work on board ship, apart from engineers and deck officers, was essentially deskilled. Previously there had been craft-type relations on board, with a master, a servant, an apprentice and so on, and sometimes they were paid in kind, or by a concession allowing them to load some cargo on their own account. Now men were paid wages and subject to strict discipline. This was no longer a community with collegial labour relations; now they were hierarchical. There no longer was the freedom, and the mystique, of sailors who climbed the main mast in a storm off the Cape. So also with the rest of the maritime work force. We noted the unskilled Egyptians loading coal in Port Said, and this sort of backbreaking dirty and dangerous work was replicated all around the ocean. Men loaded coal, chipped rust off decks, shovelled coal in the bowels of the ship, and ferried cargo on and off ships manually.

This is a convenient place to present some random data on speeds at sea, before going on to the other two technological matters, the Suez Canal and ports. It will be remembered from the previous chapter than a good speed for a sailing ship was up to 200 km a day (see pages 186–7). In the nineteenth century ships in the Great Southern Ocean, scooting along before the westerlies, could achieve over 500 km a day.65 Tim Severin's replica dhow usually made about 140 km a day. The huge barques carrying bulk cargoes from Australia to Europe went very fast in the Great Southern Ocean and elsewhere, partly to save costs and partly as they were racing each other to get to Europe first. One of them in the southern Indian Ocean covered, very dangerously, 126 miles (225 km) in eight hours, the equivalent then of 675 km in a day.66 Villiers wrote that one could expect to do about 470 km a day between the Cape and Australia, about the same speed as the great VOC ships in the seventeenth century. Modern specialist yachts do much better. In late 2001 one of the boats in the Volvo Round the World race in the southern ocean set a record by covering 640 nautical miles (1150 km) in one day of very heavy sailing. This is an average of 26.6 knots. The fastest sailing vessel on record was a trifoiler which in 1993 reached 46.5 knots over a 5,000 metre course.

These however are exceptional speeds. Further north, in the monsoon zone, times were slower, but still much faster than those claimed by Braudel for the Mediterranean. Generally speaking, with a good wind a ship could make

150 km a day. Yet without a favourable wind things could be very slow. In 1822 Fanny Parks's ship, near the equator, made only 17 nautical miles, 31 km, in a whole day. 67 Passages on inland waterways could be slower still. Emily Eden's 'flat', that is a large barge towed by a steamer, averaged only 36 km a day and was constantly bumping on the banks and going aground.

As a rule of thumb, late nineteenth century cargo steamers averaged 10 or 11 knots, the mail steamers up to 18, with 15 knots, that is 15 nautical miles an hour, resulting in a distance over a day of 650 km.68 Particular circumstances could alter this drastically. Isabel Burton travelled on an Austrian Lloyd ship which went only 8 knots, the reason being, so she darkly noted, that 'the captains have a premium on coal'. Ships in the Suez Canal also had to go slower. Burton passed through in 1876, when it was just opened. Ships could travel only in daylight, and the top speed was less then 6 knots.69 Gavin Young had an interesting voyage on a local craft from Colombo to the Maldives in 1979. The launch he was on made only 6 knots, and was wildly overloaded with a cargo of lavatory seats and bowls, chairs and tables. The crew, as is still commonly done on small craft in the Indian Ocean, had a sail and used it when the wind was favourable.70

The triumph of steam, if this be not too grand a term, was strongly facilitated by the opening of the Suez Canal in 1869. As Isabel Burton put it, 'it is the last link riveted in the great belt of trade, and the road for our ships is completely defensible.'71 In combination with steam the results were dramatic and rapid. Both the numbers of ships which transited, and their sizes, grew exponentially. The average size of ships transiting was 1,510 tons in 1880, but 5,600 tons in 1938. Total transits were 486 ships in 1870, in 1880 it was 2,026, in 1890 it was nearly 3,389, in 1900 it was nearly 3,441, in 1910 it was 4,533, in 1920 it was 4,009, and in 1930 it was 5,761. A year after the opening shipping through the Canal was 436,000 tons, in 1875 it was 2 million, in 1895 it was 8.4 million, and in 1913 it was 20 million. The tyranny of distance was greatly reduced. London to Basra via the Cape was 11,440 nautical miles, via Port Said 6,700. To Mumbai was respectively 10,780, and 6,370, to Kolkata 11,810 and 8,020, and to Fremantle 10,960 and 9,640. Put in other terms, the savings in terms of distances to be travelled were: London to Mumbai 42 per cent, to Kolkata 32.6 per cent, Fremantle 14.3 per cent, Kuwait 42.5 per cent, Singapore 27.8 per cent. 72

The main user was always Britain, and as Burton noted it was a vital link in the imperial system. The British occupied Egypt in 1882 in order to ensure British control of the canal. To the late 1880s nearly 80 per cent of the ships using the canal were British, and indeed from its opening until 1934 British ships in every year made up at least 50 per cent of the total. The central strategic importance of the canal also led to Disraeli's purchase of Egypt's shares in 1875, after which Europeans owned 99 per cent of the total shares of the company which ran the canal. Most of the employees of the company were European or Americans, as were thirty out of the thirty-two directors. The directors were paid very generously, and the British government also did well out of its shareholding. They paid £4 million in 1875, and received dividends of £86 million between 1895 and 1961.73

The indirect advantages to the British were less easy to quantify, but were massive. The canal facilitated trade, made possible faster communications with the heart of the empire, India, and rapid movement of troops from the metropole to the colonies. The reciprocal nature of the enterprise is perhaps best seen in the way Indian troops were used in 1882 to help the British take-over of Egypt, and in 1885 in the Sudan. Other consequences were legion. The canal assisted in the demise of sail between Europe and the Indian Ocean, and the Cape route became less profitable. Steam and canal were linked, while sailing ships could not use this narrow water way. Cape Town became isolated and less important in the imperial system, while east and southeast Africa were now drawn more closely in. The Red Sea route, which had been eclipsed by the Cape route since the sixteenth century, revived: steam ships calling at Jiddah rose from 38 in 1864 to 205 in 1875.74 Islands in the Indian Ocean – Madagascar, Comoros, Mauritius – once used as way stations for shipping using the Cape route, were now less important.

There was a symbiotic connection between the three elements we have delineated. Steam ships became bigger and bigger, and this was made possible by, and also required, the progressive deepening and widening of the canal. Similarly, bigger ships needed better ports, or on the other hand better ports made possible bigger ships. An engineer in 1910 vividly described this as a race:

A race between engineers: such might describe the condition of affairs in the maritime world of today in regard to two of the most important branches of civil engineering. On the one hand, we have the ship designers turning out larger and larger vessels; on the other is the harbour engineer, striving vainly to provide a sufficient depth of water in which to float these large steamships. It is a tremendous struggle. The former has set the pace, and the latter finds it hot, so much so that he is hard put to it to keep on his rival's heels. 75

We have had occasion to notice how difficult were many of the ports around the ocean before the nineteenth century. The Coromandel coast was notoriously dangerous; Kolkata and Jakarta, both vital centres, were located on treacherous estuaries. An American visitor described Jakarta in the 1830s:

The mode of landing in Batavia is not common. The water in the roads is so shallow that ships lie about three miles from the shore. . . . There are two booms, formed of wooden piles, extended seaward, for a mile, in a straight line from the shore, having a canal between them; at the entrance of which, the sea breaks over a sand bar, with such violence at times during the north-west monsoon that boats are frequently upset and the passengers are subjected to a narrow risk of becoming food for sharks and alligators, even if they escape drowning. 76

To get ashore in Chennai was, as we have noted already, a real obstacle course. In June 1765 Mrs Kindersley wrote despondently that 'I am detained here by the tremendous surf, which for these two days has been mountains high: and it is extraordinary, that on this coast, even with very little wind, the surf is often so high that no boat dares venture through it; indeed it is always high enough to be frightful.'77

Kolkata, being far up the delta of the Hughli, had no surf, but it had other perils. Mrs Kindersley, once she was able to leave Chennai, next wrote to a friend:

At length I have the satisfaction to inform you of our arrival at Calcutta. The voyage from Madras, short as it is, is a dangerous one; for the entrance to the mouth of the Ganges is a very difficult piece of navigation, on account of the many islands, cut out by the numberless branches of the river; many of which branches are really great rivers themselves, and after sweeping through and fertilising the different parts of several provinces, there disembogue themselves, with great force, and the roaring

noise of many waters. Besides there are a number of sand banks, which, from the prodigious force of the waters, change their situation. Therefore it is necessary to have a pilot well skilled in the different channels; but as such are not always to be had, many ships are thereby endangered, and sometimes lost. 78



Figure 5 Custom House Wharf, Calcutta. Produced by Sir C. D'Oyly (artist) and Dickinson & Co. (engravers). © National Maritime Museum, London

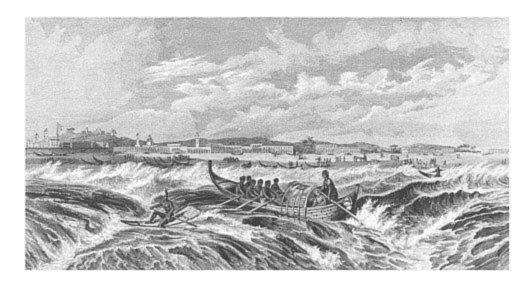


Figure 6 Madras. Produced by Leighton (artist) and William Measom (engraver), c. 1848. © National Maritime Museum, London

In 1845 Fanny Parks left Kolkata, being towed by a steamer, yet even so the passage nearly defeated them. 'At 8 a.m. while we were in tow of the steamer the *Essex* ran upon a sandbank; she fell over very disagreeably on her side, was thus carried by the violence of the tide over the obstacle, and righted in deep water.... The pilot was much surprised, as a fortnight before that part of the river was all clear.' The rush of the tides was a real hazard: 'This evening the tide ran with such violence that after the vessel had anchored, it was necessary for a man to remain at the helm. This steering an anchored vessel had a curious and novel effect.'79 Macabre sights added to the distress of the traveller. Up river from Kolkata in 1810 Mrs Graham described how

The other night, in coming up the river, the first object I saw was a dead body, which had lain long enough in the water to be swollen, and to become buoyant. It floated past our boat, almost white, from being so long in the river, and surrounded by fish; and as we got to the landing-place I saw two wild dogs tearing another body, from which one of them had just succeeded in separating a thighbone, with which he ran growling away.80

Clearly all this was quite unsatisfactory. New ports had to be created to facilitate the movement of people, and especially of goods. The main ports to serve the steam ships were Aden, Mombasa, Mumbai, Karachi, Colombo, Chennai, Kolkata, Singapore, Fremantle and Jakarta, and then others in East Asia and eastern Australia. Jakarta is a good example of what the imperialists did. As we saw, the approach was quite impossible. Silt from the river Tjiliwong, on which it was located, meant that the foreshore extended by over 20 metres a year! The rapid rise of Singapore after its founding in 1819 was disastrous for Jakarta. As Earl noted in 1832, Jakarta

was formerly visited by numbers of large junks from China and Siam, and by prahus from all parts of the Archipelago; but since the establishment of the British settlement at Singapore, the perfect freedom of commerce enjoyed at that place has attracted the greater part of the native trade, while that formerly carried on by junks between Jakarta and China has totally ceased. <u>81</u>

The Dutch took action. As early as 1832 they built two long piers, but these failed to solve the problem, and finally they had to build a whole new port

to serve Jakarta, at Tandjung Priok, 10 km from the capital. This was done in the 1880s. The work included a rail link to Jakarta, an inner harbour, and an outer harbour with two heads each 1,850 metres long, and with an entrance of 125 metres. The object was to enable the Dutch to compete with Singapore, and for a while this was successful. However, the latter was advantaged by a good natural harbour and being a free port for nearly all imports. The late nineteenth century tin and rubber boom in Malaya provided another boost, so that while Jakarta did well in trade within the Malay world, Singapore remained the major international blue water port.

Moving south, the rise of Fremantle provides a good illustration of how harbour works could make a port, and undo a competitor. Fremantle was the port of Perth, the capital of the new, in 1829, colony of western Australia. However, the port had virtually no natural harbour, and was blocked by a bar, so the mail steamers went on around to Albany from their beginning in 1852 and for 30 years thereafter. The powerful merchants and politicians of Perth found this unsatisfactory. Fremantle's first jetty, built in 1873, was 420 metres long, and ten years later this was extended to 1,150 metres. By the end of the century a fine man-made inner harbour was ready, and Albany was immediately left to sink into insignificance.

Turning Chennai into a viable port was one of the great achievements of British colonial engineering. But it took a very long time! Plans to build an artificial harbour were approved in 1872, and work began five years later in the form of two huge breakwaters. Before they were finished they were damaged by a cyclone, and this part of the project was only completed in 1895. Even then there were problems, one being that the entrance silted up at the rate of one foot a year. Worse, it soon turned out that the breakwaters had been badly designed: they had to be totally remodelled between 1906 and 1912. Then another cyclone struck in 1916, which washed away the end of the sheltering arm, the lighthouse, and 8,000 tons of rock. The engineering part of turning Chennai into a decent port was completed only in 1925.

A good port needs adequate facilities for clearing cargoes and passengers on shore, and again it took a long time to arrange this in Chennai. Around

the end of the century an engineer's report complained that

Between high-water mark and the streets of the town of Madras there were to be found a few confused and unregulated railway sidings and two or three exiguous sheds. The beach was to be seen at all times littered with timber, coal, railway materials, general cargo, machinery, liquors, etc., all in dire confusion. Every packet of dutiable goods landed along the beach, unless too big to be handled, was obliged to be carried on men's heads to the Government Customs House across the street, while goods arriving over the old screwpile pier had to be pushed to the same Customs House on lorries. The entire dutiable trade of Madras had to pass in, and the empty lorries pass out, through one 10-foot Custom House gateway. The result was that it was no uncommon thing for a consignee not to get his packages under several weeks or even months. Machinery and railway packages used to be piled up in stacks, sometimes three or four deep, on the beach, and it was constantly happening that, before the cargo of one vessel could be delivered to waiting consignees, that of another had perforce, for want of sidings, to be dumped on top of it. In fact, the arrangements were about as bad as they could be.83

So on land also a complete remodelling had to be done, and this was completed between 1906 and 1912.

Colombo provides an example quite analogous to Fremantle. At first the steamers bound for Australia and Singapore called at Galle, which had a better natural harbour. Colombo handled Sri Lanka's export and import trade, in sailing ships. However, Galle soon was unable to service larger steamers, and the government decided that Colombo was to be turned into the major port in Sri Lanka. There were obvious reasons to do this: it was the capital, and it had much better access to the plantations which developed in the interior in the second half of the nineteenth century. More generally, it actually was much better located than was its rival, Mumbai, to service ships going from the Red Sea to southeast Asia, the Bay of Bengal, or Australia. By the 1880s Colombo had been provided with a basin of 203 hectares of sheltered water up to ten metres deep, which could take twentyfive of the largest steamers at the same time. In the 1890s more breakwaters, a fishery harbour and a coaling depot with eighteen jetties were completed. The port flourished from the early 1880s to the 1920s because, in terms of our previous discussion, it had both a hinterland and a foreland. The plantations provided large exports: first cinnamon, then coffee from the 1840s, tea from the 1890s, and early in the twentieth century coconut and rubber were added. In 1910 Colombo was the seventh port in the world in terms of tonnage entering.84

Karachi constitutes perhaps the best example of all of a port created to serve new, imperial, needs. There had been minor ports around the estuary of the Indus for centuries, but they were of little importance, and in the nineteenth century were bypassed in favour of Mumbai. In 1839, when the British annexed Karachi, it had a population of a mere 15,000. It then boomed as the American Civil War opened a large new market for Indian cotton. Between 1857–58 and 1863–64 the value of its trade increased threefold. Once American raw cotton production began again Karachi slumped. However, the British were developing vast, fertile, new tracts in the Canal Colonies of the Punjab, and in 1878 opened a rail link from there to Karachi. Trade boomed again. From a value of Rs 40 million in 1867–68 it rose to Rs 110 million in 1882–83 and 330 million in 1904–05. All this was made possible by large scale engineering to turn a poor harbour into a good one. A mole, a breakwater, a groyne, piers, berths and wharves were all built and the harbour entrance was deepened.85

Dredging, mundane though it may seem, was one of the great underpinnings of the development of these ports. By 1914 the lagoon at Cochin was nearly inaccessible to modern ships. In the 1920s the British dredged a channel 5 km long, 135 metres wide, and 11 metres deep, and the fill created Willingdon Island, still to be seen in the harbour. Cochin prospered as a result. So also for Basra, which was captured by the British in 1914. Army engineers immediately constructed quays and a railway yard, and brought in modern cranes. After the war Iraq became a Mandate, and began to export oil. To facilitate this the Shatt al Arab was dredged. Previously this waterway was so shallow that vessels had to load 80 or even 160 km away at sea. Dredging meant that ships up to 9 metres draught could reach Basra. In the case of Mumbai it was not a matter so much of creating a harbour, for the port has a fine natural one, but rather of creating land. Mumbai was originally seven islands, separated at high tide and joined by mud flats at low. The history of the town is a history of reclamation, of the city being invented from marshes, salt flats, isolated islands and even open sea.86

Most of these ports were creations *de novo* of the imperial powers, and especially of the British. True that in many of these locations there had been minor ports before, but they were totally transformed by the west. When an existing port was redone to produce one adequate for the needs of the steamers, a pronounced dualism often resulted, as in Colombo. So also in Aden, where the modern steamer port is 6 km from the traditional dhow harbour at Ma'alla. Mombasa was a very old port, but was totally transformed from the end of the nineteenth century by the British. It had essentially been a trans-shipment port, but the British created for it a hinterland. This was done by building a rail line, beginning in 1896, far inland to Lake Victoria and later to Kampala. Originally undertaken for strategic reasons, to counter any threat from French or German rival imperialism before World War I, the rail subsequently enabled Mombasa to develop as the main port in East Africa. In 1960 Mombasa had 70 per cent of all land-sea transfers in the region. Here again however a pronounced dualism resulted. The old dhow harbour was left to whither, an anachronism so far as the colonial rulers were concerned, and a new port, Kilindini, created which could accommodate steamers and which linked in with the British dominated central business district in town.87

The rise of Mombasa meant that other East African ports were left to fall into insignificance, at least in term of being linked in to blue water routes. This happened all over the Indian Ocean as imperial concerns dictated that one port be privileged at the expense of another. Fremantle rose, Albany fell; Colombo triumphed over Galle; Mumbai over Surat; Chennai over a host of traditional ports in Coromandel; Singapore over Melaka; Jakarta over other ports in Java. In South Africa Durban superseded Cape Town, Port Elizabeth and East London. It had 52 per cent of landed cargo in all South Africa in 1918.

There are important differences in the roles of these colonial port cities as compared with earlier times. We have written extensively about port cities in the pre-colonial period, and stressed that when they prospered they did so partly because of location, partly because some could draw on productive hinterlands, but mostly because merchants knew they would be treated fairly. The early western port cities often also did well for these same reasons. In the earlier period they had extensive forelands, going even to

East Asia and to Europe, and they drew products from the interior. The crucial change came when the Europeans did not just trade with the interior, but rather began to control production there, and finally conquer the inland. The great example obviously is India. The port cities in the colonial era were different, as for the first time their influence was turned in on the land, rather than out to the Indian Ocean. In landed terms they became the entry points for industrial products from the west, and exit points for raw materials from the colonies. In maritime terms, as Broeze and his colleagues put it, they 'have been the gateways into this maritime world as well as the nodal points of the interlocking system that comprises it.'88 And they were totally imperial creations. The engineering works were directed by westerners, and financed by loans from Europe which paid good rates of interest to western investors guaranteed, just like the analogous railways, by colonial revenues. In terms of opportunities for investment, or encouraging the acquisition of new technological skills, there were no backward linkages to the countries in which they were located; in these areas they were colonial enclaves. They were then in several aspects central parts of the process which incorporated and subordinated the colonies to the metropole.89

It was not however just a matter of the west being able to establish a port wherever they wanted; nor could they always build their ports in the best harbours or places with favourable geographies. Access to the foreland, and to the hinterland, dictated development as much as did imperial decisions; the two went hand in hand. Kolkata provides the best example. We have noted how difficult it was and is to access this delta port. It is a very difficult 80 miles from the sea, and has an intimidating tidal range of 22 feet. Yet the fact that the city was essentially built on silt provides an explanation for why it had to be where it was. Silt produces very fertile agricultural lands which fed the city. The main export in the nineteenth century, jute, grows on silt. The maze of waterways were a hazard to navigation certainly, yet they also provided low-cost access to a vast riparian hinterland.

The pattern in the nineteenth century is mixed indeed. The broad trend is one where successful competition with the imperial powers became more and more difficult, and local seafarers were reduced to operating in the interstices of their system, rather than competing with them in areas in which the imperial power took an interest. The fate of Indian shipping and Indian shipbuilding provides an instructive example. The famous Parsi Wadia family established a fine shipyard in Mumbai. Between 1736 and 1821 they built 159 ships of over 100 tons, and 15 of them were sizeable ships of over 1,000 tons. Some were used by the Royal Navy: Codrington's flag ship at Navarino, the Asia, was built by the Wadias. 90 In 1813 they built the Cornwallis, 1,767 tons and 74 guns, and in 1821 the largest, the *Ganges*, 2,284 tons and 84 guns. This indigenous enterprise declined when steam came in. Steam ships and tugs were assembled from prefabricated parts brought from England. However, British dominance, while largely a result of technological advances, also had a pronounced political underpinning. British shipbuilders gave themselves a pronounced advantage even before iron and steam. The Registry Act of 1815 restricted entry of Indian sailors and Indian-made ships. It imposed an extra 15 per cent duty on goods imported on Indian-built ships, and three-quarters of the crew must be British, or the ship would be forfeit. 91 There was a strategic dimension here: it was seen as essential that Britain continue to have a reserve of trained sailors in the merchant marine who could transfer to the navy in time of war.

As the century advanced Indian shipping declined, thanks again to political factors as much as technological: after all, Indians could have hired expertise if they lacked it themselves. However, the education the British provided in India was oriented to produce clerks, not engineers. We have already described in detail the subsidies and other patronage which P&O and BI enjoyed, which was not available to Indian competitors. If an Indian rival did appear, they would be subjected to a fierce rate war until they gave in. Similarly, the conference system, which regulated competition, and discouraged the entry of newcomers, was not available to India as it was not an independent country.

The decline is clear to see. In 1857 a comparison of British and Indian ships entering Indian ports shows there was a pronounced gap even this early. Over 35,000 of them, with a tonnage of 1.2 million, were owned by Indians, 59,000 of 2.4 million tons by English interests. The average tonnages were respectively 35.6 and 41.6. By the end of the century things had changed

dramatically. Those Indian owned were just over 2,000, with a tonnage of 133,000 for an average size of 57.8 tonnes, while British owned totalled over 6,000, tonnage 7.6 million, and an average size of 1,235 tonnes.92

Local people then had to work in the gaps and interstices of the imperial structure. This applied to the local Portuguese as much as to Indians and other Asians. The Portuguese and Indians operating under their auspices were able to function in the cracks of the now dominant British system in India. The best earner was opium. Malwa opium was smuggled to Portuguese ports on the west coast of India, and from there to their Chinese colony of Macao. As a measure of the success of this trade, around 1830 the British were importing over 7,500 chests of opium a year to Guangzhou, but at the same time Portuguese subjects were sending via Daman over 1,800 chests. The Portuguese state also collected much revenue from this trade, though much more was done illegally. Indeed, most of the buildings in the new capital of Panaji were built from profits from opium.

Yet being a part of the empire, even as a subject, could have advantages. Several distinct Indian groups played large roles in the economies of other British colonies in the nineteenth century. These groups controlled vast amounts of capital. Surat's trade declined in the second half of the eighteenth century to be sure, yet until the end of the century Surat 'was still the financial centre of western India, and Mumbai, though politically its master, was still its financial client.'93 Philip Curtin wrote an important book about 'trade diasporas', but to the extent that these Indian groups retained strong ties with their homes and went back and forth to them this concept seems invalid for our period. The Chettiar firms of Tamilnadu were headquartered in Chennai, but had branch offices in South Africa, Mauritius, Ceylon, Burma, Malaya, South Vietnam and Indonesia. They operated under the British umbrella to bring these areas, notably Burma, into a modern cash economy, but at a high price for the people concerned, witness vast indebtedness and land alienation in Burma. These were very much joint family affairs. Younger members were sent overseas for a time, and then brought back to the family centre in Tamilnadu. All this is much more like the notion of circulation put forward by Claude Markovits than it is of Curtin's diaspora.94

Indian traders and merchants and officials played a large role on the East African coast. Zanzibar was a main centre: in 1886–87 forty-four per cent of the island's exports went to India, and 40 per cent of its imports came from there, handled mostly by Indian firms. The longer distance intercontinental trade was done by European and American firms. In 1857 there were six European and three American firms represented in Zanzibar, but they used local Indian agents to sell their imports and collect their exports. Richard Burton in this same year noted that

Ladha Bamha farms the customs at Zanzibar; at Pembe Island his nephew Peru has the same charge; Mombasa is in the hands of Lakhmid and some of his co-religionists; Pangani is directed by Tulsidas... even S'aadani has its Banyan; Ramji, an active and intelligent Banyan, presides at Bagamoyo and the customs at Kilwa are collected by Kishandas. I need hardly say that almost all of them are connected in blood as well as trade.96

While Indian shipping certainly declined, the British pax over the ocean did facilitate Indian finance, albeit that the cost of the pax was borne by Indian taxpayers. Indian financial houses, often Gujaratis, as Burton also noted, backed Indian traders and money lenders, often kin members or at least community members, all around the littoral of the western ocean. Sir Bartle Frere in 1873 described all this: 'Hardly a loan can be negotiated, a mortgage effected, or a bill cashed without Indian agency.' And:

Everywhere, wherever there is any foreign trade, it passes through the hands of some Indian trader; no produce can be collected for the European, American or Indian market, but through him, no imports can be distributed to the natives of the country, but through his agency... it is difficult to convey to those at a distance an adequate idea of the extent or completeness of the monopoly.97

Indians also settled in the Aden colony, where they ran businesses that dealt with Somalia and Ethiopia as well as working as an administrative class for the British. The Cowsaji Dinshaw firm, based in Aden with branches in Zanzibar and Mumbai, even ran a steamer service between Aden and East Africa. They also helped pay for the construction of a Zoroastrian fire temple in Aden, which is in itself a good example of the types of encounters with the alien that occurred during this period. There had not been a Zoroastrian presence in South Arabia since the Sassanian conquest, but a new one was created both there and in Zanzibar as a consequence of British influence. The pop star Freddy Mercury was one such Parsi, from Zanzibar,

and in typical fashion he was educated in India and found fame and fortune in the West.

The other people who operated in this way were the Chinese in southeast Asia, who especially in Malaya and Indonesia controlled most of the retail sector, and important parts of the import and export trades. Tin mining in Malaya, and rubber cultivation in Indonesia, were both largely dominated by Chinese.

In other areas also Europe was not totally in control. In Mauritius and Madagascar the colonial powers had to learn from indigenous people how to engage successfully in agriculture. Many local trades continued: the Chinese junk trade to Thailand, dhow trade all around the shores of the eastern ocean, peddling all through the ocean. Earl noted in Bangkok in 1833 that 'The brig we found at Bankok belonged to natives of the Coromandel coast; and many of the Kling seamen had goods of their own, which they hawked about the towns further in the interior, exchanging them for sugar, ivory, gamboge etc, and their vessels consequently remain several months in the river.'98

Nor were all Europeans in the ocean lords of all they surveyed. There were many European common seamen, and soldiers, whose lives were rough indeed. The sealers in the far southern ocean perhaps lived lives no better than the poorest peasant in Java or India. These men were left on St Paul and Amsterdam islands, to kill and skin seals. After some months, or even years, the ship would come back to collect them and the skins. On these isolated islands, some 1,500 sea miles from Africa, Antarctica, Sri Lanka and Australia, the men subsisted on meat and eggs alone. Their lives were extremely hard. An account of 1797 said

the seabears were killed while they were warming themselves in the sun on the rocks along the shore and the wide bay. Because only the skins had value for them, they left the skinned bodies lying rotting on the ground in such masses that it was difficult not to stand on these bodies as one went ashore. Each step there revealed a highly revolting sight and everywhere there was a foul stench of rotting flesh [which] poisoned the air.

In 1820 an American ship found two men who had been left behind in a 'cave which was a wretched hovel to be sure, built in the cavity of the rock,

with a kind of shrub matted together for a front, and a couple of square holes left in it to let the lights in. The... bed, which was two sealskins, was a pigstye and everything else there in one room. The whole was a picture of human misery.' So efficient was this industry that by about 1810 the seal population had been exterminated, as also the original flora and fauna, which fell victim to fires and the introduction of new species like pigs, which soon went feral, and deer, goats and rabbits. The pigs also plundered seabird nests and ate the eggs and the young birds. In sum, the islands once 'were green, now they are brown, desolate and despoiled.'99

These sealers, and whalers also, travelled long distances from their homes in America and Europe to the hunting grounds, then back to Guangzhou to sell the catch, and then home again, where they hoped to use their profits to buy a farm and give up the sea. Who else travelled over our ocean? The general point is that in previous times people travelled by sea to be sure, but not that many, and most of them came from, and visited, only littoral areas. Now there were many more people travelling. Some of them came from inland, such as bonded labourers, and some came from right outside, that is Europeans bound for the settlement colonies in the southern ocean: Australia, New Zealand and South Africa. Our travellers include pilgrims, religious exemplars, troops, bonded labourers, westerners travelling within their empires or back home to the metropole, and slaves. We will discuss slaves first.

There was always a considerable internal slave trade within Africa, but we will focus on long-distance trade by sea. This trade had existed for many centuries. The greatest flow was from Africa to the Middle East. Among the early Europeans the Dutch were the main traders, bringing in quite large numbers from Africa and India to work as domestics and on plantations in Indonesia, and from Madagascar for the Cape. The Portuguese were also involved, but to a lesser extent. However, the trade grew exponentially once plantations had been established by Europeans on the islands of the ocean. We lack authoritative estimates of the numbers involved, but certainly some hundreds of thousands were sent to the European islands, and many more to Brazil and Cuba. French planters in the Mascarenes brought in slaves from Madagascar, and then from the East African coast. Later the Seychelles also required slave labour. Mauritius and the Seychelles became British in 1814,

but the slave trade continued until the British abolished it in 1834. Even after this there was an extensive illegal trade, especially to the French island of Bourbon. Meanwhile there were two other main streams: from Portuguese Mozambique to Brazil, and from Zanzibar to the Middle East and the northern Swahili coast. Their treatment here seems to have been much less oppressive than on the European plantations, being nearer to clientage than to the horrors of a slave life cultivating sugar. Pfeiffer commented on this difference in Madagascar in 1857, where she claimed that to be owned by a native was much preferable to being owned by a European:

The position of slaves is here, as among all half-civilised nations, much better than that of their fellow-bondmen among Europeans and Creoles [by which she means Europeans born in the Indian Ocean area]. They have but little work to do, are fed about as well as their masters, and are seldom punished, though the laws do not at all protect them. 100

Not all slaves came from Africa: on Mauritius in 1806 ten per cent were of Indian origin. Nor did they all work on plantations for Europeans. Many worked on the docks, in construction, as sailors and as pearl divers in the Gulf.

The nature of this trade changed once the British had abolished slavery and took steps to stop others trading in human beings. The French planters in response pretended that their slaves were really bonded labour, not property. Abolition was a difficult task to accomplish. One British officer told Captain Sulivan, who commanded a ship off the East African coast and inspected every ship he came across, that 'If we go on condemning these vessels for having only a few slaves on board, we shall be having our supplies cut off again from the interior.' All too often a suspicious dhow would be chased, only for it to beach itself and crew and passengers escape inland. Independent Zanzibar was a particular problem, constituting a gap in the system of patrols that the British tried to enforce. It was only in 1873 that the sultan was persuaded, or rather required, to stop exporting slaves from his island, while it was only after Zanzibar came under British protection that domestic slavery was ended in 1897.

It is useful to distinguish three sorts of colonies around the Indian Ocean in the nineteenth century, with rather different people travelling across the ocean to reach them. First are the settler colonies, where white people displaced indigenous inhabitants: South Africa and Australia are the obvious examples. Second are plantation economies, with a mostly imported population, of which Mauritius is the type study. Finally, there are mixed areas, where Europeans ruled indigenous people and also introduced a host of migrant Indians and Chinese: Burma, Indonesia, Sri Lanka and Singapore all fit here. 101

Once slavery was abolished a new form of labour was required. This was the indentured labour system, whereby poor people were recruited for a set number of years to work for low wages, after which they were free to work for themselves. This was hardly a new system, as it had operated across the Atlantic to the British North American colonies in the seventeenth century. The difference was the scale, and the fact that most of the indentured labourers were Indian; there was a racial as opposed to class element involved. The broad context is of a steep rise in the movement of people around the world in the nineteenth and early twentieth centuries. A large part of this was Atlantic, with a huge influx of free labour to North America. In the Indian Ocean the movement was not of free people. Chinese indentured labour moved to southeast Asia, and Indians to the islands, to South Africa, Burma, Malaya, and far afield to Fiji, Guyana and Trinidad.102

The majority were Indians. Once slavery was abolished in South Africa, labour was still needed, and the local Zulus were not interested. Between 1860–68, and 1874–1911 around 176,000 Indians were imported.103 In several parts of the tropical world plantations were booming, first sugar, and then coffee, tea, and later rubber. The system began in Mauritius in 1834, which island in total received 450,000 Indian labourers. The system was soon extended to other places beyond the ocean. Between 1834 and 1937 thirty million left their homes to go overseas, and 24 million returned. These workers certainly made more money than they would if they had stayed in India, but conditions of work were often brutal, and those who through illness could not work lost pay. However, if they survived the first few years they often could save and send money back home to their families in India. Indians were preferred, as free African labour was seen at the time as more or less useless: too stupid, lazy and unreliable. Indians, on

the contrary, were perceived as docile, industrious, and respectful, or so it was thought at first. When they began to assert themselves the European planter stereotype changed: they now were greedy, weak and dirty, and Chinese were preferred instead. 104

To call this a new system of slavery is perhaps to paint too black a picture. It is true that conditions on the plantations could be very harsh, but on the other hand skilled labour could do very well. One way to provide a context is to note that the death rate among Indians on the voyages from India to Mauritius was much higher than that of free white labour going to the settlement colonies of the Americas or Australia, but much lower than on the slave voyages across the Atlantic. 105 Unlike slaves, there was a good chance of returning home, as the figures above show. In the case of Burma, a third of the Indian population moved in and out each year. Some 450,000 Indians came to Mauritius between 1834 and 1910, and 157,000 returned home.

Another variant in the category of more or less coerced movement of peoples was the use of Indian troops and police all around and beyond the ocean. They played a crucial role in extending, and maintaining, the British empire. Sikhs were used as police around most of the shores of the ocean. Gurkha mercenaries similarly served from Hong Kong to East Africa. The Indian army took a very large part — even 50 per cent — of the Indian colonial budget. Indians were paid about one-third of what British troops got, and served in Egypt in 1882, the Sudan in 1885, China in 1900, and several times in Burma and East Africa. Indian involvement in World War I was massive: a total of Indian combatants and non-combatants of 44,000 in East Africa, 589,000 in Mesopotamia, 116,000 in Egypt, and 50,000 in Aden and the Gulf.106

An important consequence of the movement of so many people was an increased mobility of disease. In most areas this was not a matter of the virgin soil epidemics which devastated native populations in the Americas and the Pacific, which in turn facilitated European conquest. Most of the ocean, some islands excepted, was part of a common Eurasian disease pool, so that frequently some immunity had been built up. Indeed, if anything it was the newly arrived Europeans who were most threatened by 'Indian

Ocean' diseases. However, a vastly increased mobility, along with the development of poverty and slums in the port cities, did lead to much greater outbreaks of common diseases even if they were not new to the areas. Leprosy was a problem in the eighteenth century in the Cape, and may have arrived with the Malay servants and slaves that the Dutch introduced. As communications improved diseases could spread more quickly, no longer so hindered by the vast extent of the ocean which previously had acted to restrict the spread of 'crowd' diseases like cholera, smallpox and plague. A new and very virulent type of epidemic cholera spread out from Bengal several times during the nineteenth century. The first devastating episode was in 1817–22. Its spread was helped by movements of people: hajjis, troops, migrant labour. Cholera reached Java in 1821 and killed 125,000 people, while on the other end of the ocean, in East Africa, there was a particularly serious outbreak in 1865. The hajj was a great transmitter of this disease, and mortality at Mecca itself was often fearsome. In 1865, out of a total of 90,000 pilgrims, 15,000 died. In the 1880s rinderpest was introduced into Ethiopia, probably again from India, and in the next decade spread, with devastating effects, down the East African coast.107

It is now time to set sail again, and look at the actual experience of people travelling over the ocean in the great western steamships. For now I will discuss only westerners; local travel by indigenous people will come later. There are a plethora of quotable accounts. My task was to use enough of them to give this section a whiff of ozone, to inspissate or leaven my dry descriptive prose with a more immediate maritime experience, yet to avoid overwhelming this chapter with undigested anecdotes and accounts of sea travel.

We can start with an account of a voyage from Kolkata to Europe in 1799. Our traveller took a barge from Kolkata for three days to get to the ship, but was disappointed when he went on board:

We found the ship in the greatest disorder; the crew principally composed of indolent and inexperienced Bengal Lascars, and the cabins small, dark and stinking, especially that allotted to me, the very recollection of which makes me melancholy. The fact was that as Captain Richardson [his patron] and myself were the last who took our passage, all the good apartments had been previously

secured by our fellow passengers.... In the next cabin to mine, on one side was a Mr. Grand, a very passionate and delicate gentleman; and on the other side were three children, one of whom, a girl three years old, was very bad tempered, and cried night and day; in short, the inconveniences and distresses which I suffered on board this ship were a great drawback from the pleasures I afterwards experienced in my travels.

There followed a delay of two weeks while the captain spent time in Kolkata, and then the dangerous passage down to the sea. 'During our passage down we had several narrow escapes. Our vessel drew thirteen feet and a half of water; and we passed over several sands on which there were not six inches more water than we drew. Had the ship touched the ground, as the tide was running out, we should have stuck there, and probably have been lost.' They reached the open sea only one month after our author had left Kolkata, and already water and provisions were running low. When they reached the equator those who had not crossed it before were ducked, but 'When it came to my turn, by the mediation of one of the officers, and a present of some bottles of brandy, I was excused this disagreeable ceremony.'

Not a happy traveller, our author found four problems with his ship:

The first is that to which every ship is liable; viz. the want of good bread, butter, milk, fruit, and vegetables; to which are to be added, stinking water, and washing the mouth with salt water . . . and the difficulty of getting to and from the quarter-gallery, with the danger of being wet, or drowned, while there. To these I should add, the state of suspense and agitation to which a person is constantly exposed, the confinement in one place, and the sickness caused by the motion of the ship.

The second class arose from want of wealth; viz. a small and dark cabin, and the consequent deprivation of air and light; the neglect of servants; the want of a ship cot, on account of the deficiency of room; and the tyranny or rudeness of my neighbours, who ever studied there own conveniences at my expense.

The third class is confined to foreigners, by which, I mean persons who are not Europeans; viz. the difficulty of shaving oneself; the cutting of one's own beard and nails; not having any private place for ablution; the necessity of eating with a knife and fork; and the impossibility of purification. From the latter I suffered much inconvenience; for as it was only customary on board to draw up water in buckets early in the morning, at which time all the crew washed themselves and whatever else they required, I was frequently under the necessity of drawing it up when I wanted it, in one of my own

copper vessels; but during the rough weather many of these were lost in the attempt, and I was at last reduced to one ewer. I therefore relinquished the practice of purification, and was consequently incapacitated from the other duties of our religion.

The fourth is confined to ships not belonging to the English; viz. noise and tumult when any business is done; the abusive language made use of while heaving the anchor; the quantity of bilge water allowed to remain in the ship; and the unnecessary destruction of every thing on board. To these may be added, the quantity of stinking salt fish and putrid eggs of which the sea store is composed, and the absurd custom of the crew lying on the wet decks; with a total want of discipline in the sailors, and science in the officers. 108

All standard enough, but the third complaint should have given the game away, for indeed this traveller on a Danish ship was an Indian Muslim. But apart from this his observations fit well with a host of other accounts of long voyages before the age of steam. He was unlucky in the matter of food, but this was because he was travelling on the cheap. In 1811 Mrs Graham sailed on a Royal Navy frigate, and the admiral in charge had laid in stores – a lot of stores. 'I found on board stores of every kind, sheep, milch goats, wine, preserves, pickles, fruit, vegetables, in short, everything that could possibly add to the comfort or convenience of a long voyage.'109 She passed the time pleasantly, 'after breakfast I always write or study for three hours, after which I draw, or do needle-work, till dinner-time, when I again read for an hour or two before I take my evening's walk, so that my time will not hang heavy on my hands in fine weather.' A cabin passenger bound for Australia in the late 1830s wrote that 'You will think we do nothing but eat and drink when I tell you that we have hot breakfast at half past eight, meat and new rolls, tea and coffee at twelve, grog and biscuit at half past three, dinner all fresh meat and very good at seven and at nine grog and biscuit.' Should this not be sufficient, one could provide one's own food, and take on fresh supplies when the ship called in at any port. 110

In 1845 Emma Roberts published a book which was full of practical advice for the traveller from England to the east: what to take, what to expect, how to behave. It gives a good impression of life on board in the time before steam and Suez. The best cabins were on the poop deck, even though they were noisy, as the hen-coops are usually placed upon the poop, and though the unfortunate denizens of these prisons may occasionally be quiescent, every movement of the ship causes the feet of the coops to strike against the deck. In bad weather, or during the working of the vessel, the noises made by trampling overhead, ropes dragging, blocks falling etc etc are very sensibly augmented by the cackling, chuckling, and screaming of the poultry....

But this was actually good training: 'Without, however, wishing to alarm those per sons whose destinies are fixed in India, it may be said that the noise on ship should be looked upon with some indulgence, it being merely preparatory to the disturbances which must be endured on shore.' One should take a couch to have in one's cabin, 'since, when the ship is rolling, a recumbent attitude is exceedingly desirable.' One should also take a filtering machine for water so as to 'be furnished with a fair portion of wholesome water with which to perform their ablutions, instead of having every sense offended by the wretched stuff so often served out from the casks.' A supply of brandy was advised, to ensure good service from the crew. 'There is, generally speaking, more gaiety on board outward, than homeward bound vessels; few of the former sail without taking passengers visiting India for the first time, and these, buoyant in spirit, and enjoying the freshness of youth, usually endeavour to beguile the tediousness of the voyage by getting up a play or a concert.' She also provided a long list of desirable clothing.111

Frederick Trench left from Chennai on a small French ship bound for Europe. The passage was bearable, but hardly exciting:

The days are passed as usual at sea very dully. Turn out at day light, read, chat and walk a constitutional till breakfast and then at the sound of the cloche de dejeuner descend to the cuddy and sit down before the following cheer — an omelet, a hash or mutton chop, a dish of chopped grilled potatoes, a cheese, and three or four bottles of claret and after breakfast, in compliment to the Anglais, comes a weak cup of tea without milk. To this fare, however incongruous, I have at length accustomed myself and make a hearty meal of it in general. We have dinner at four and the intermediate hours we passed in writing, reading, smoking, chatting, walking and listening to and learning the lingo of those around. Yesterday we came across a huge shoal of porpoises, which remained playing round the ship. Pleasant to have any thing to relieve the harmony of the sea and sky or afford a topic for conversation. 112

Food was a constant preoccupation on these long voyages. Mrs Fay's voyage from Mocha to Calicut was unpleasant; she liked none of her fellow passengers, and once the ship nearly had to put back to Mocha so that the captain and one of the passengers could fight a duel. Food soon became scarce, and she learnt to grab it as soon as it appeared. She kept busy by retiring to her cabin and making shirts for her husband. 'How often since, in this situation have I blessed God, that he has been pleased to endow me with a mind, capable of furnishing its own amusement, in despite of every means used to discompose it.'

It was a case of feast or famine. Mrs Fay in 1786 wrote that 'The table was at first profusely covered; being our Captain's favourite maxim "never to make two wants of one"; Every one foresaw what must be the consequence, but he would not listen to reason.' He announced that the ship was nearing St Helena, where provisions could be had, but then they discovered that they were still off the east coast of Africa:

On examining the state of our water and provisions, after the error was discovered, we were put on an allowance of a quart of water a day, for all purposes; and for nearly a month before we arrived here, we were forced to live on salt provisions; even the poor children and the sick, had no better fare.

There was another problem with food on this ship too, at least for the ladies. Her travelling companion, Mrs Tottingham,

at first took her meals in the Cuddy, but the gentlemen were in general too fond of the bottle to pay us the least attention; after tea, we were never asked to cut in at cards, though they played every evening. Captain Lewis swore so dreadfully, making use of such vulgar oaths and expressions; and became so very rude and boisterous, that Mrs Tottingham withdrew entirely from table, and never left her cabin for the last thirteen weeks; but the Colonel [her husband] took care to send her whatever was necessary; I had no one to perform the like kind office for me, and was therefore forced to venture up among them, or risk starvation below.

On her voyage out in 1815 Mrs Fay also was confined to her cabin, but on this occasion because she was escorting six young ladies to India. They 'were only five times on deck during the passage, which was owing to the previous arrangement between the Captain and me, to guard against imprudent attachments, which are more easily formed than broken – and I am happy to say the plan succeeded to our wish.'113

As more people travelled the quality of food for the common immigrant was far different from what the elite had and continued to have. Lancelot L. Earl was an assisted immigrant to Australia in 1882. When they were sixty-seven days out from London they ate a porpoise, 'perhaps what made it seem so nice to us was because it is going on for 3 months since we eat any other than salt or preserved meat or salt junk, as the sailor's term is, but salt leather would be a better name for it, and therefore anything of a fresh nature is a treat for us.' Three days later 'There is not even a potato left, so we have to be contented with what is called preserved potato, which looks something like sawdust, and don't taste much better, but there is plenty of sea biscuit left so there is no fear of starving.'114 Convicts and assisted immigrants to Australia lived for months on a diet essentially of bread and water, some salt beef, and occasional cheese, sugar, tea and pork.

Long voyages could be tedious. Fanny Parks had a fine time coming out to India as there were lots of gallant officers on board and she flirted to her heart's content. Coming back in 1822 was less fun:

This has proved a most uninteresting voyage as far as it has gone, nothing to be seen; one solitary albatross appears now and then, and a few Cape pigeons. The other day I saw a sperm whale blowing at a distance. There is nothing to look at but the boundless ocean; even the sunsets and sunrises have not been remarkably fine....115

So also Lancelot L. Earl in 1882:

The days have hung very heavy on us as we do not have much to do, although we pass the time along by playing various games, such as ship quoits, which are made of rope, and have to be thrown within a chalk ring. We also find a deal of sport in playing at Touch, as we chase each other up and all about the riggings and ropes. Slipper [?] and Tugs of War between married and single men caused a great deal of sport, as the married men pulled us all over the ship, and a great many other games the sailors have put us up to. 116

If the weather allowed people danced and put on plays, learnt languages preparatory to arriving in India, and found other improving ways to pass the time.

The weather controlled everything in these sailing ships. We will write about storms presently, but being becalmed in the tropics was also at the

least unpleasant. In October 1822 Fanny Parks was stationary in latitude 4° S.

The heat was very great; the vertical sun poured down its sickening rays, the thermometer in the shade of the coolest cabin 86°; not a breath of air.... The sails flapped against the mast, and we only made progress seventeen knots in the twenty-four hours! Thus passed eleven days – the shower bath kept us alive, and our health was better than when we quitted England. M. mon mari, who was studying Persian, began to teach me Hindostanee, which afforded me much pleasure. In spite of the heat there was gaiety on board; the band played [that is the band of the soldiers on the ship] delightfully, our fellow-passengers were agreeable, and the calm evenings allowed of quadrilles and waltzing on the deck, which was lighted up with lanterns and decorated with flags. 117

Storms were a fearful event indeed, and we have numerous hair-raising accounts of severe ones, especially in the southern reaches below the Cape. Here is one from 1880, by an immigrant travelling to Australia, Richard James Whyte, on a small sailing vessel, the *Helena Mena*. In heavy weather in the southern ocean,

the wind blows the ship on one side till the bulwarks are level with the water, then – BUMP – BANG – comes the sea against the side sounding (if you are below) as if the side of the ship was being knocked in, the vessel trembling like a leaf at every blow, if your duty happens to take you along the deck when she is so struck you know directly you hear it that you are doomed to get drenched if you are on the side which she is struck, but there is no real danger to the ship....

Soon after, in a violent gale,

the sailors were as busy as bees furling the sails, the water being thrown up as high as the main stay sail, the sea running mountains high and over the edge of the bulwark, till it looked every time as if the ship must go over. I scrambled down below and with some difficulty got to bed, between 12 and 3 the gale reached its height, and the ship pitched, rolled and plunged to an extent alarming, everything was being rolled from one side of the ship to the other in the most fantastic confusion. 118

Steamers and the canal produced a quantum change. The main thing was regularity and predictability. One could guarantee that the voyage would take so many days, and even that one would arrive at a certain time. Voyages lost some of their tedious and dangerous aspects. Human relations also changed, for there is a major difference between being fellow passengers for a few weeks as compared with months. The age of steam also coincided with the high point of British imperialism: indeed P&O

especially typified and represented this, and also helped to create it. The stately liners, marvels of technology in the second half of the nineteenth century, were a visible symbol of British dominance. As they eased their way through British dredged channels to British built berths in British colonial ports they visibly and metaphorically pushed aside the host of smaller indigenous craft in their way.

This is very much a later nineteenth century matter. The opening of the Canal made a huge difference, as now one did not have to trans-ship at Alexandria and travel overland to Suez, there to pick up another ship to travel down the Red Sea. The itinerary of Emma Roberts, travelling from London to India in 1838, shows that even with steam a voyage could be long and arduous. Travelling by small steamers and diligences, it took fourteen days to reach Marseilles from London. She then took a steamer to Leghorn, Malta and Alexandria, and then a small boat to Cairo. The next part of the journey was overland to Suez, which took three nights and two days. The passage on a steamer from Suez to Mocha and then Mumbai took another sixteen and a half days. In total her trip took sixty-one days,

Once the Canal was open the journey became very routine, and very fast. The P&O line was always considered to be the poshest, even if the appealing notion that POSH is an acronym for Port Out Starboard Home, these being the preferred shady sides of the ship, unfortunately has no linguistic validity. They carried the mails, had the gilt edged, official, passenger trade, and never allowed dogs on board. When Leonard Woolf went out to Colombo on the P&O liner *Syria* in 1904 he had to send his dog on another, less restrictive, line. Mark Twain left an agreeable account of first-class travel in 1896 as he went from Ceylon to Mauritius:

Customs in tropic seas. At 5 in the morning they pipe to wash down the decks, and at once the ladies who are sleeping there turn out and they and their beds go below. Then one after another the men come up from the bath in their pyjamas, and walk the decks an hour or two with bare legs and bare feet. Coffee and fruit are served. The ship cat and her kitten now appear and get about their toilets; next the barber comes and flays us on the breezy deck. Breakfast at 9.30, and the day begins. The people group themselves about the decks in their snowy white linen, and read, smoke, sew, play cards, talk, nap, and so on.... If I had my way we should never get in [to a port] at all. 119

The imperial aspect was very strong indeed, even when not on a British ship. Isabel Burton and her husband Richard sailed on an Italian ship, he being Consul at Trieste. Nevertheless, there were plenty of occasions for imperial activity. In the Red Sea in May 1876 they passed a lighthouse, and

They dipped flag to us, as the Captain paid us the compliment of flying the red Union Jack for the Queen's birthday. Lloyd's made us an extra good dinner for this occasion, and I brewed a claret-cup, and we drank Her Majesty's health 'three times three,' with a fervent 'God bless her!' at the end. Then followed the healths of Emperor Franz Joseph and the Empress, the Captain and the officers. The old Captain was quite affected by this unusual scene, for we made the old Italian ship ring with British cheers, and he ordered champagne and drank to our Queen and to us, in a very pretty speech; we afterwards sang 'God Save the Queen' on deck, and then the Austrian national hymn. 120

Indeed, so British was the whole route that some even found it disappointing. Harding, later to be an important mandarin in London, travelled out to the colonies on the *Medina*, a magnificent 12,400 ton steamer, in 1913. He was Secretary of the Dominions Royal Commission. There was some exotica to be sure. Port Said was 'a compound of a second rate French watering place... and a fourteenth rate Eastern town. The most attractive parts of it were the children in various stages of costume from half a nightshirt to what one is accustomed to see, and the goats taking around the morning milk. They bring it to the door and are milked into bottles.' The crew was mustered, the lascars on one side and the white crew on the other, 'and very curious they looked — with a variety of coloured sashes and Company's uniform.' But mostly it was all too familiar: when he got to Aden he said it was all worthwhile,

if only to realise the extraordinary 'Britishness' of this particular route. One sails on comfortably for three or four days and then, when things are perhaps becoming a trifle monotonous, one finds a relaxation in the shape of a port very British-looking (in all but the houses and population [hard to tell then what he *does* include as being 'British']) and with all the necessary appliances for buying Kodak films, Whisky, Picture Postcards and other British delights. I think it really ought to be called 'the Imperial Piccadilly.'121

The first-class passengers travelled in great style; indeed Isabel Burton complained that her English fellow-passengers on the Austrian ship 'want their huge lumps of beef and mutton four times a day. They eat up the provisions like locusts, and drink the cellar dry almost before we got to

Aden.' The well-connected Ruby Madden, from an elite Melbourne family, may have been a typical traveller in the heyday of the empire. Once her ship left Fremantle, bound for Colombo in 1902, 'I always breakfast in bed and then dress at my leisure, and it makes the day not so long and dreary.' Ruby had a new outfit every day, and dirty underwear was simply chucked out the porthole, as washing facilities were minimal. Singing and duets, just as in a country house weekend, helped to pass the time. Her account is mostly about her clothes, and which men paid welcome (or unwelcome) attention to her. She changed ship in Colombo, and rested in the Galle Face Hotel while her luggage was transferred. Arriving in Mumbai, she was met by an important official who further eased her arrival. 'I need not have worried myself at all about the Customs for he left word for everything to be passed and his servant waited to bring it home, and we drove off in a sweet victoria, with rubber tyres and footman and coachman. They look so smart with green and gold livery and broad belts and turbans.'122

Nevertheless, even luxurious first-class travel had its up and downs. Rigid divisions amongst those ruling India began on the voyage out. Military, Indian Civil Service, and planters kept themselves separate. As the boats neared India, Punjab Club members wore white jackets and black trousers, Kolkata Club black jackets and white trousers. The extent of the compartmentalisation is well summed up in a story (possibly apocryphal) concerning a governor's daughter who found her first-class companions stuffy, and had a one-night fling with a handsome second-class steward. Next morning he approached her, but she froze him and said 'In the circle in which I move, sleeping with a woman does not constitute an introduction.'123

Other tales of childish, snobby, behaviour are legion. Captain Sulivan in 1866 was travelling down the Red Sea in a passenger ship, en route to take command of an anti-slave Royal Navy frigate. Some of the passengers had come to Suez via Marseilles, some from Southampton via Alexandria, and the two groups did not get on.

Passengers via Southampton improved their acquaintance by criticising passengers via Marseilles. Passengers via Marseilles played chess &c, together, and always looked as if they knew something the other party would like to, but didn't. . . . Passengers by Southampton steamer laughed and talked

together as they had never laughed and talked before the other party joined. The former played croquet on deck, the latter backgammon below. 124

Leonard Woolf, a rather precious, though also perceptive, 24-year-old recruit to the Ceylon Civil Service also noticed a change among his fellow passengers. At first there was an 'uncomfortable atmosphere of suspicion and reserve which is at first invariably the result when a number of English men and women, strangers to one another, find that they have to live together for a time in a train, a ship, a hotel.' As the voyage of three weeks proceeded they evolved into 'a complex community with an elaborate system of castes and classes. The initial suspicion and reserve had soon given place to intimate friendships, intrigues, affairs, passionate loves and hates.' Class was very much in evidence, with strict divisions between civil servants, army officers, planters and business men. 125

These class distinctions, landed society transferred to the ocean, were also in evidence in leisure cruising. One of the earliest cruises for pleasure of which we have details was that undertaken in the *Sunbeam*, a screw composite three-masted schooner, with two engines, and bunkers which took 80 tons of coal. Its length was 157 feet, and it displaced 531 tons. On its first long voyage, in 1876–77, those on board were Thomas Brassey Esq. MP, Mrs Brassey, one son, three daughters, Hon.

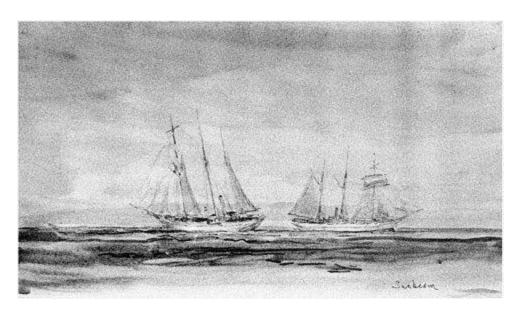


Figure 7 Study of yacht *Sunbeam*. Unmounted. Produced by William Lionel Wyllie (artist). © National Maritime Museum, London

A.Y. Bingham, E. Hubert Freer, Commander James Brown, RN, Captain Squire, T.S. Lecky, RNR, and Henry Percy Potter, surgeon. The crew of twenty-three included a sailing master, and a forecastle cook, who catered to the crew. The passengers were looked after by another cook, a cook's mate, a nurse, a lady's maid, and a stewardess. 126 Thomas Brassey was a very considerable figure in England in the late nineteenth and early twentieth centuries. Born in 1836, he was an MP from 1868 to 1885, was created a baron in 1886, and rose to an earldom in 1911. He had various jobs, and served on several commissions, yet also found time to cover some 400,000 miles in the *Sunbeam*, being away for a year or so at a time. His wife left a fascinating account of the voyage of 1876–77. Her husband helpfully wrote in the foreword that 'The practised skill of a professional writer cannot reasonably be expected in these simple pages' 127 yet the book sold well and was translated into French.

The account gives a marvellous impression of cruising by an elite at the height of imperial certainty. Lavish meals and fine wines were served every night. To ensure fresh supplies live animals were taken on board and slaughtered as needed. In Valparaiso they took on six sheep, sixty chickens, thirty ducks, and forty-eight pigeons. They held church services on board every Sunday, and Mr Brassey did the sermons. It was a most leisurely progression, with long stops at any port of interest to them. Most often they called on the governor when they disembarked, and sometimes they turned out to be acquaintances, or even old school or college mates of Thomas's. Some impression of the tone can be gained from a comment when they were in Colombo: 'There are a great many venomous snakes in Ceylon, but they always get out of the way as fast as they can, and never bite Europeans.' In Galle they took on three black firemen, 'two from Bombay and one from Mozambique, a regular nigger' who coped with the heat of the engine room very well, so 'it was fortunate we met with these amiable salamanders.' Standards were rigorously maintained. 'We always observe Sunday by showing a little extra attention to dress, and as far as the gentlemen are concerned, a little more care in the matter of shaving.' In Alexandria they met their old friend Richard Burton, and in Malta they

entertained HRH the Duke of Edinburgh. When they anchored off Cascais, in Portugal, there was another vessel already there with three ladies on board. This created a real dilemma for Mrs Brassey as to 'whether they, as first anchored in the bay, should call on us, or we on them, as probably the greater travellers and out longer at sea.'128 The maritime experience here is very much in the background. The Brasseys took their landed society, and opinions, and rank, with them, and could as well be doing a tour of Europe by land as be on board a ship.

Life on the passenger liners for those not in first or second class was rather different. Troopers going out to India, and later coming from the colonies to serve in World War I, travelled in rather squalid and crowded conditions, while their officers had three-quarters of the ship, complete with cabins, lounges, smoking rooms, libraries and fine food. Wilfred Pearce, travelling with his mounted regiment to war in Europe in 1914, complained of 'a great deal of pinching... ones hammock, towels and soap very often disappear. I have also lost my overcoat several times.' The troopers had to look after their horses, and 'Doing stables means a good deal of work as the horses have to be exercised a good deal and all the stalls cleaned.'129 On immigrant ships bound for the colonies conditions again were often crowded and uncomfortable. Sometimes they even helped on board. Albert Loaring was on a ship with both steam and sail. Once he and others helped bring in sail, and then 'the Captain had us down in his Cabin, and gave us a glass of rum each that had helped [bring in the sail]. A Glass full of Raw Rum full not half full. He is a Splendid Captain. You would not find another Captain like him.'130 Another steerage passenger returning to London from Australia had to do his own washing up, and there were no baths: 'when it gets hot weather we may have the hose turned on us early of a morning.' The ship had a refrigerated room for meat and poultry, but steerage had very poor food and some paid extra to the steward to get better. One night he saw the butcher 'weigh an ice-preserved Murray cod of fourteen lbs for the rich mans dinner.' Even church services and impromptu entertainments were segregated according to class. Another migrant had a very hot passage through the Red Sea. Four or five of his fellows 'went off in a dead faint this afternoon, and some of the 1st class passengers going the same way, the Captain put the ship to go around.' Later he noted that 'There is a fancy dress ball tonight in the 1st Saloon Deck, but we can see nothing of it'131 On one typical passenger liner in the 1920s there were 732 third-class passengers, and twelve first-class. The latter shared 'A' deck with the officers, doctor and chief steward, and had a dining room at the forward end. Third class were on 'C' deck, 248 in berths in permanent cabins, and 434 in portable cabins fixed in compartments which sometimes were used for cargo. On 'B' deck there was a dining room with long benches, a smoke room and social hall, and some promenade space too.132

I have read masses of travel accounts as I thought about this book. My absolute favourite traveller is an unlikely one. Her name was Juanita Harrison, a poor black woman born in Mississippi around 1890. Her account gives excellent impressions of travel for the masses, and reveals a most engaging and refreshing character. I will try not to quote too much of her idiosyncratic account. Her central attitude was that 'theres not so much difference in Human Bines once you mix Them up.' In March 1929 she travelled third-class on the *Orana*, of the Orient line, going from Suez to Colombo.

Well the Orana are a Queen. I went straight to see about my cabin as I intended to get off if I didnt get what I asked for. the Purser said I wanted all jam. he gave me an uper Berth in the quiet foot of the Ship with Two lovely modist young Greek Girls one are going To Sydney to be married. Her skin are so fair she have never used Powder the other are a very modist Flapper we keep the Cabin neat and all retire at the same hour so everything are peasful in that line.... On boad are Hundered of English going to Australia at the expence of the Government young couples with their children and single young men and Girls from 17 to 22 and they are certainly a bright healthy handsome ship load. the Third class are lovely large wide decks a swiming pool everything like a pin then a large laundry with soft water and ironing boads. at night moost of the Girls sleep on deck since it became warm they use the First Deck and the Boys the Second. we had chicken [her favourite] only one day and that day I was sleeping under a life boat and did not hear the bell. I did not care but the others felt sorry for me.

A week later 'the time have gone so fast I fell like asking for my money.' At stops along the way she got out and about with no hint of racism or condecension: 'Think what a turist miss not to do such things.'

On a French ship she enthused 'Its good to be with the French again and get a change of Food. most of the Passangers are French. an English Lady an her young Lady Daughter sit by me at table they have lived down here 5 years but know nothing about India.' Then after Colombo

Yesterday I had to use my coat it being our first rough sea and while most of them was nurseing their sea sickness I to keep it off scrub my Cabin floor washed the mirrows port hole and the seat that run across the wall. The Boy had let it go for two days. I found his brush and soap and felt fine altho the boat was jumping up and down at each end. I am the first woman on deck each morning I enjoy seeing the Sun come up out of the Sea I was pleased it was rough yesterday it was the first time we had roost chicken plain lettuce salad and icecream.

Later, in the Red Sea, 'It is ever so home like on this Steamer everybody do just as they wish. the French, Germans and Itilians are so much nicer to travel with than the English and yet the English are lovely in their country.' 133

Juanita Harrison seems to have brought her sunny, optimistic and tolerant nature with her, and preserved it through a remarkable nine years of travel around the ocean. For others however the voyage was a liminal time. Victor Turner brought this term forward in his analysis of people travelling on pilgrimage, but it has subsequently been used to apply to all types of travel. His key notion was that in the liminal stage of a journey, that is on the actual journey as compared with setting out or arrival, there develops a strong feeling of communitas amongst the travellers. This occurs 'when the subject is in spatial separation from the familiar and habitual... [it stresses] generic rather than particularistic relationships... it is any condition outside or on the peripheries of everyday life, and a time in which the rules recognized as legitimate by the political and intellectual elites at a given time' are less operable. 134

This notion has some utility, but must be used with considerable hesitancy. For example, the governor's daughter used the steward for sex, but clearly felt no sense of communitas with him. More generally, we noted the rigid divisions aboard most ships, so that if anything 'the rules recognized as legitimate' were reinforced. On the ships carrying settlers to the new colonies, officers read out detailed instructions before the ship sailed, and there was rigorous checking for stowaways and disease. E.M. Forster, bound for India in 1912, took a pith helmet, a deck chair, plenty of visiting cards, a cummerbund for night train travel, chlorodyne, quinine, and

avoided celluloid underclothing for his time in India. Off the coast of Arabia he recorded that the other first-class passengers had all gone over to dressing, but he was still in morning dress as he could not find his evening tie. All this hardly sounds very liminal, and nor were his relations with his fellow passengers any different from what they would have been on land. 'They think us very queer on board, but are not uncivil & term us 'the professors.' The women are pretty rotten, & vile on the native question; their husbands better.' Equally predictable and routine, Forster became very friendly with a young officer who, according to the editor of the letters, was 'a dedicated homosexual.'135

How then were people different when they travelled by sea? For some it was a long rest, a welcome break from routine, as Mark Twain noted with great approval:

there is no mail to read and answer; no newspapers to excite you; no telegrams to fret you or fright you – the world is far, far away; it has ceased to exist for you – seemed a fading dream, along in the first days; has dissolved to an unreality now; it is gone from your mind with all its businesses and ambitions, its prosperities and disasters, its exultations and despairs, its joys and griefs and cares and worries. They are no concern of yours any more; they have gone out of your life; they are a storm which has passed and left a deep calm behind. There is no weariness, no fatigue, no worry, no responsibility, no work, no depression of spirits. There is nothing like this serenity, this comfort, this peace, this deep contentment, to be found anywhere on land. If I had my way I would sail on for ever and never go to live on the solid ground again. 136

Voyages had different meanings for different people; much depended on the purpose of the voyage, and the previous life experience of the traveller. In 1822 Fanny Parks ended up on a ship carrying troops, but fortunately they were from a regiment where many of her relatives had served, so she had a fine time flirting with the young officers. Yet she also noted perceptively that 'Perhaps no friendships are stronger than those formed on board ship, where the tempers and dispositions are so much set forth in their true colours.' 137 For those travelling out to serve for the first time in India, it was 'a very necessary period of quarantine between two quite different spheres of existence.' The voyage also played a role in socialising new chums, as they were given, or had forced upon them, advice from the old hands. Leonard Woolf wrote poignantly, though fifty years after the event, about

his setting out for Ceylon. He called his departure his 'second birth'. He wrote how 'The umbilical cord by which I had been attached to my family, to St Paul's, to Cambridge and Trinity was cut when, leaning over the ship's taffrail, I watched through the dirty, dripping murk and fog of the river my mother and sister waving good-bye and felt the ship begin slowly to move down the Thames to the sea.' He took with him ninety large, beautifully printed volumes of Voltaire, the 1784 edition. After some initial doubts, he found that he could get on quite well with his fellow passengers; indeed 'the world and society of the boat are a microcosm of the macrocosm in which he will be condemned to spend the remainder of his life.' When he got to Colombo he found that 'There was something extraordinarily real, and at the same time unreal in the sights and sounds and smells.' If you stay at home everything has a 'subdued, flat, accepted reality' but if you travel 'one feels as if one were acting in a play or living in a dream.' All this said, Woolf spent only seven years in Ceylon. He then went on leave and stayed with his family in the house they had lived in for thirty years in Putney. He got back together with his old Cambridge friends, fell in love with Virginia Stephen, and reverted to his life before he left, apparently unaffected by his seven years in a very different environment. 138

For many passengers the voyage was simply very boring and routine. There is a depressing similarity about the accounts of voyages through the Mediterranean, the Canal, and via the Red Sea to the Indian Ocean. Basically all accounts show a strong inward gaze, describing the conditions on board, boredom, meals and mealtimes, entertainment, accidents and death. The outward gaze concerns the weather and boats being passed, flying fish (very often mentioned), while the Ocean is merely the medium on which one travels – 'nothing but water' – or rough sea, a hazard one has to cross (as quickly as possible).

Many passengers hoped that the passage through the Canal, a major engineering feat and in an area redolent with history, would be quite fascinating.

What thoughts come crowding to the mind when the Red Sea is mentioned. Sailing down the Canal we crossed the track of Joseph and Mary when they were fleeing into Egypt with Jesus, now sailing thro' the Red Sea we pass over the spot where the Pharoah was overwhelmed and all his host with

him. The sailors were at it with their yarns about finding chariot wheels hung on the anchor. One of them upset the thing a little by saying the Rubber tyre was eaten away by crabs. I think we have as fine a lot of yarn spinners as can be found on any ship. 139

But these expectations were often crushed. Joseph Woodhouse wrote that 'of course, on entering the Canal, & for a short distance through it, great interest was manifested by the passengers. This, however, soon passed away as on further progress it was found that nothing but a vast monotonous stretch of sandy desert was to be seen on either side.'140 On another occasion Emma Tompsitt wrote that 'This morning we passed a succession of rocks called the Twelve Apostles; they are not very large, and there is nothing extraordinary about them. The stewardess says there is a tale attached to them, but she does not know it, and as I do not, there is an end of them.'141 Dr Mackenzie wrote,

We now entered the Suez Canal, which I am not at all anxious to see again. Dreary desert as far as the eye can see on either side and canal itself muddy and abominably offensive to the sense of smell. Visions of Enteric fever amongst the souls under my care would keep rising in my mind & made me impatient with our slow progress. The heat was very oppressive [it was April].... Several Arabs were seen striding (with tremendous strides) along the banks of sand – many of them on some pilgrimage – poor fools. 142

The Suez Canal and Red Sea were both hot and boring. Forster noted perceptively that one really has seen it all before, though his comment would hardly apply to most passengers. The canal

was in a way disappointing, for the East has been so painted that nothing was new. It was like sailing through the Royal Academy – a man standing by a sitting camel, followed by a picture of a camel standing by a seated man; picturesque Arabs in encampment, ditto in a felucca. Scene of Pharoah's mishap. Mount Sinai & god on the top in a cloud. 143

Heat was the other problem. A doctor's wife in 1883 wrote when they got to the Red Sea that 'It is getting too hot to do anything, if you sit still you feel suffocating, if you move, perspiration wells from you. It is much too fatiguing to make lemon squash but the ice is not quite exhausted yet, so we exist on ice water.' They long for a breeze, 'But here when the breeze came it was hotter than ever and was like a breath of hot air out of an oven sweeping across one's face.' 'People are fainting all over the ship, just

dropping down onto the deck all around us.' Then a passenger died, mostly as a result of heat, and also a young baby for whom 'human care & sympathy were alike of no avail, the Great Reaper with his sickle keen had gathered yet another flower into his mighty sheaves.' Similarly in 1901, 'It is red hot here, we none of us have scarcely any clothes on, perspiration rolls off us in streams. I expect we shall lose over 3 stone before our journey ends. We cannot sleep downstairs so brought 2 beds up on deck for the children. Sam and I slept in our deck chairs, ladies on one side of the ship and gentlemen on the other.' A fat old man died, 'they say he drank a lot . . . they found over 30 stout bottles under his bunk.'144 The prac tical Isabel Burton got her fellow passengers organised to try and cope with the heat.

Every night we slept on deck, in rows, whilst in the Indian Ocean and Red Sea; for the cabins were like heated ovens, and we darted down only to dress as quickly as we could. At six a.m. we went, in our dressing-gowns, to the saloon, and took coffee; and then we read, talked and slept on deck in the day; my husband and I a little apart when seriously employed with literature. In the evening we sang glees and duets. We abolished *toilette*, and dressed in loose white or coloured cotton, or linen, dressing-gowns. 145

Even blue water sailing, around the Cape or in the Indian Ocean, could be boring. Many journals merely record meals. William Lawrence noted for 11 June 1884, 'we had pickles served out to us and salt pork and pea soup and pottatoes for dinner and this afternoon was just the same as any other day. Nothing but water all round you. Marmalade for tea.' Or 18 June 'We had harricot beans boiled pork and soup for dinner after dinner the nap as usual we had a birth on board but it died soon after birth same as usual for tea after tea had a concert in our cabin and the doctor took the chair minnie sang do they miss me at home the people down the other end had a prayer meeting.' So also William Heeley in 1890: 'There is nothing particular to record, only it is getting monotonous with not seeing anything but water for so long – 8 or 9 days. We shall be at Colombo either tomorrow or Wednesday, so that will be a nice break.' And after Colombo, 'Nothing has been seen yet since we left Colombo, not even a passing ship, that is, I have not seen anything, nor heard of anybody who had. It begins to get jading seeing nothing but water, water all around.' And yet again, six days out from Aden, 'We have not sighted a sail or steamer the last 24 hours. Already the Voyage is beginning to get tedious & no wonder considering the little excitement that prevails on board, of course I find the time drags fearfully, not having anything to do. Speed on my bark, land us safely at our destination.' Later again, 'Of course one knows that Sunday is very monotonous on board.' And next day, 'I am pretty well tired of reading already & only now & again do I get a game of chess or cards, yet that will soon be spent up everybody seems to long for the end of the Voyage.'146

There were other hazards also: steam did not make travel completely safe and comfortable. We have pointed to the effects of heat, but even the sturdiest steamer could still be threatened by storms. The *Pathan*, an iron hulled twin-screw steamer of 1,790 tonnes, 103.7 metres long, hit the full southwest monsoon as it entered the Indian Ocean in July.

As soon as we passed Cape Guardafui, the ship began to roll most fearfully. George immediately turned a ghastly white and sank into an armchair, and several of the girls lay down on mattresses spread along the poop and prepared for the worst. The lower deck was soon cleared as the waves were washing over it. The spray was coming in torrents over the captain's bridge and the funnel was soon perfectly white with salt. The waves looked like moving mountains and this great ship... was tossed like an insignificant toy from side to side. 147

When Harding's ship left Colombo he wrote ruefully that

I always pictured the neighbourhood of the Equator as a calm region with the bluest of skies and the hottest of heats. Instead we have been beating along all day under a cloudy sky with occasional torrents of rain – to the accompaniment of a strong wind and the consequential rolling and pitching. Beside all that it has been most horribly damp and everyone has been either sea sick or limp in the extreme. I belong to the latter band. 148

Whatever the hazards and discomforts, the arrival in the East, especially if it was the first time for a traveller, was always something special and memorable. Conrad got this well. He was on a small boat.

We drag at the oars with aching arms, and suddenly a puff of wind, a puff faint and tepid and laden with strange odours of blossoms, of aromatic wood, comes out of the still night – the first sigh of the East on my face. That I can never forget. It was impalpable and enslaving, like a charm, like a whispered promise of mysterious delight.

So also the people:

And then I saw the men of the East – they were looking at me. The whole length of the jetty was full of people. I saw brown, bronze, yellow faces, the black eyes, the glitter, the colour of an Eastern crowd. And all these beings stared without a murmur, without a sigh, without a movement. They stared down at the boats, at the sleeping men who at night had come to them from the sea. Nothing moved. The fronds of palms stood still against the sky. Not a branch stirred along the shore, and the brown roofs of hidden houses peeped through the green foliage, through the big leaves that hung shining and still like leaves forged of heavy metal. This was the East of the ancient navigators, so old, so mysterious, resplendent and sombre, living and unchanged full of danger and promise. 149

As they neared Mumbai men arriving to serve in India found that

During the last few days a feeling of excitement did begin to build up. There was the hot, sunny weather, the flying fish dropping little droplets of water on to the smooth sea – everything seemed to be beautiful. There was a difference in the air or in the atmosphere or in the heat or in the way the wind blew or possibly even the smell, and then the unique smell of India, difficult to pinpoint, partly the populace, partly the different vegetation, partly the very rapid fall of dusk and the cooling off which leads to a most lovely scent just after sundown. 150

And so also Frederic Trench, arriving from Ireland to serve in the EIC army in 1826. Nearing Chennai,

On turning out this morning at four o'clock I heard that the morning gun from Fort St George had been distinctly heard, and hastening on the poop, anxious to get the first view of the Asiatic shores, I was surprised and delighted with the balmy fragrance of fruits and flowers which the land breeze brought us from the shore and about five minutes afterwards not less so, as we strained our eyes towards the long-wished for port to perceive the land and the glaring white houses of Madras on the verge of the horizon. As we gradually and slowly approached, the view became more distinct and was truly gratifying after so long an absence from any object to relieve the eye from the dull, boundless and unvarying expanse of sky and ocean. 151

This, it must be pointed out, was not just an arrival at a new place, say going across the Atlantic to America. This was arrival in a mysterious, fabled, different place, the East.

Not all maritime travel was oceanic, and we can conclude this lengthy account of European travellers by noting coastal and riverine travel. Isabel Burton in 1876 took a middle-sized steamer down the west Indian coast from Mumbai to Goa. The voyage was pleasant: 'beautifully clean, with good table, excellent wines, airy cabins, great civility, ship very steady in

wind and swell, fares extravagantly dear.' The seas were rough, even though being May the southwest monsoon would not yet have started. The steamer stood off the coast and let passengers go ashore to Goa in a row boat, a distance of eight miles and a rather hazardous eight miles too. Getting back on board some weeks later, after a very unpleasant stay in Goa (a 'fetid hole') was extremely dangerous. They waited four days for their steamer to arrive, for although they were meant to run like clockwork, every two weeks, theirs was much delayed. (For the actual process of getting on board, see pages 35–6.)152

Again Juanita Harrison provides a nice contrast. In 1929 she went from Chittagong to Rangoon in a packed local steamer:

they have many hundred 3rd Class on board at one end of the Boat are a Hindoo resturant and a Mohammed one Both very clean I had dinner from the Mohammed. Chicken curry with Rice. The curry doesnt tast nothing like the dryed curry powder we get. Here they use the fresh Curry. I ate so much and to fast so with the Sea became seasick and felt wonderful after. When I came on boad they said that European women were not allowed to travelle as Deck Passanges. I answered I had my ticket and I couldnt pay any more and if they didnt like it they must pay the differents. everything is going lovely now.

Later she met 'another Gentleman a Very smart Professor and a strong Buddish He talked for 2 hours to me on that faith and I was so thankful it was just what I wanted to hear I sat very quiet and took it all in he spoke about it said I was a good listner as most Christians argue.'153

In 1837 Emily Eden went on a voyage up the Ganga with her brother. She complained about the discomfort, too many dinners, and so on, but this was a very luxurious, imperial progression, for her brother was Lord Auckland, the Governor General. The vast entourage was in 'flats' towed by a steamer. It was a slow progress indeed, making only 200 miles in the first ten days, partly as the boats kept going aground, and partly as Lord Auckland frequently had to go ashore to receive local dignitaries. In this same year Emily's sister Fanny Eden went to Rajmahal, northwest of Kolkata, to hunt tigers. She and her nephew had an entourage of 260 camp followers, and twenty elephants. Coming back down river, they anchored every night and 'we had our dinner table set out upon a very handsome sand-bank. It looked so odd when we were walking a little distance to see a table with silver

plate and candlesticks and nothing to relieve it of any kind, for the budgerows [river boats] were hid by the bank.' This luxury contrasted strongly with what happened to her servants. One day they travelled for 17 hours on the shallow river without stopping. This was 'to the utter desperation of the Hindoos [among her boatmen], whose caste will not let them cook on board a boat. So some of them went more than twenty-four hours without eating.'154

We have privileged European travellers, partly as their accounts give vivid impressions of life at sea when the ocean was a British lake, and partly as they have left so many quotable accounts behind them. Yet it will be remembered that between 1834 and 1937 around 30 million Indians left their homes to go overseas, and 24 million returned. The majority of travellers were still indigenous people, travelling as slaves and later as indentured labourers, or for trade, pleasure, or reasons of piety. We will look at the pious travellers first, but always remembering that piety and pelf were intricately connected: most pilgrims chaffered their way to the Holy Land. Similarly, there was a connection between worldly success and religious prestige.

We have written about the hajj earlier in this book (see pages 173–5). The passage to Jiddah was strongly facilitated by the introduction of steam ships, which led to a substantial rise in the number of hajjis from both India and Indonesia. In the later nineteenth century a total of at least 100,000 performed the pilgrimage each year, and some 30,000 of them came by sea. Isabel Burton was in Jiddah in 1876, and as this was a Hajj al Akbar (an especially auspicious hajj, as the time of the standing at Arafat was on a Friday) there was a larger crowd than usual: according to her 138,000. She left an extended account of what she saw. Her ship picked up 800 returning hajjis. They were packed in like sardines, and several died. They were 'Somalis, Hindis, Arabs from Bokhara, Kokand, Kashgar, Turcomans, Persians, Tashband, Russian subjects, Bengalee and etc etc.' and they all suffered greatly from lack of food combined with rough weather as the ship met the northeast monsoon. 155 In 1817 Col. Johnson travelled in the Gulf on a small ship.

About thirty men and women were huddled together with their provisions, merchandise and part of the ship's cargo in the great cabin. These were Mahometans from the Carnatic travelling on a pilgrimage of Holy Tombs of Kurballa and Mecca.... The bustle and confusion of this crowded scene were augmented by a multitude of monkeys, paroquets, cats and other domestic animals.

The adventurous Mrs Elwood in the 1820s came down the Red Sea on a dhow. 'She was heavily laden with merchandise, and with Hjadjes, of which there were not fewer than 300 on board, it was deeply immersed in the water and as the deck was too crowded to admit of my walking across it, I was positively compelled to enter my cabin by a ladder suspended from the window.' Other passengers, there were 300 in total, were Nubian women and girls taken prisoner by Mahomet Ali's soldiers, who were being sent for sale in the Jiddah slave market; their price was about two dollars a head. They were naked from the waist up, and much ornamented with glass beads, but 'seemed perfectly happy.' From Yambo her dhow was accompanied by many other ships, also laden with hajjis and grain. 156

The rectification efforts of Muslim divines were described in an earlier chapter (see pages 175–7). This effort continued to the present. I have chosen to focus on the role of people from the small south Arabian coastal area known as the Hadhramaut, which has been much studied. The two main ports are al Mukalla and al Shihr. This is an important diasporic community, still active today, which has created important economic and religious links all around the ocean. They worked as mercenaries, merchants, religious authorities and humble labourers in Java, Hyderabad, the Gulf, and all of East Africa. They retain ties to their home, send their children home for their education, send back money, and try to retire there. One recent example is Osama bin Laden. His family became very rich in the construction industry in Saudi Arabia, though they retain their Hadhrami links, as indeed it appears does/did Osama. Osama thus should be seen as an extreme example of a Hadhrami bent on propagating a particular view of Islam.

My main interest is in sketching the continuing role of Hadhramis, and others from the heartland, in propagating and purifying Islam around the ocean world. Two examples of Islamic practice may be useful, at least heuristically, to make the point about what they were faced with. On the one

hand, Alan Villiers left us a touching vignette of religious practice on board a large dhow in 1940. It was called, very appropriately, the *Triumph of Righteousness*. There was only one book on board, the Quran, and the master, Hamed, and others often read in it. 'When he came to a good part Hamed would sometimes call a small group together and read aloud, in a very pleasant and well-modulated voice, and they would discuss whatever they had read for hours. They seemed to find perfect content in this book, and never tired of reading it.'157 This then is a humble depiction of orthodox piety among ordinary Arab folk.

Contrast this with the career of a new saint, St Expédit in Reunion, in the Mascarene group. One version of his origins (there are several conflicting accounts) holds that around 1931 a box of sacred relics were sent from the Vatican to Reunion. The label detailing the saint's name fell off in transit. All that was left was a stamp on the side of the box in Italian which said SPEDITO (expedited), whence came St Expédit. Maybe, on the other hand, he was a 'real' saint whose name had been changed. In any case, a cult developed and he has become the patron saint of the island. There are about 350 shrines to him, covered in bright red paint. They have many meanings, including a voodoo element, as these shrines can be used for bedevilment. The saint is invoked to cure sickness, pass exams, settle differences. He appeals to all the religions on the island. The Catholic hierarchy have accepted him and merged him in with the early martyr St Elpiduce. Hindus see him as yet another incarnation of Vishnu, and pray to him if they want children, and Muslims tie cotton threads to his shrine, just as they would with a Sufi shrine. He is also important for the descendants of slaves who still worship spirits like their Malagasy ancestors. Some of the sorcerers on the island have decapitated some of the images in the shrines, either to neutralise his power, or to use the head in their own incantations. 158 This sort of religious practice is much more characteristic of the beliefs and customs of most people around the ocean, as compared with the rigid orthodoxy of either ulama or priests. However, for our present purposes the point is that this is what the reformers from the Islamic heartland had to deal with.

These men from the heartland advocated what they considered to be a 'purer' Islam, one closer to the Quran and the customs of the Prophet. Most

insidious, from their point of view, was the continuing influence of pre-Islamic practices all over the Indian Ocean Muslim world. There were also now new challenges in warding off irreligious elements of the influence of the west, such as the position of women, and the consumption of alcohol and forbidden food. Finally, it was a matter of warding off innovative un-Islamic practice, such as the veneration of St Expédit.

We can start in India, and look at the career of Sayyid Fadl, very influential in the Mappilah community of Malabar in the nineteenth century. Early in his career he spent four years visiting Mecca and the Hijaz. When he returned his political activities in Kerala annoyed the British rulers, who finally made him emigrate to Arabia in 1852. Subsequently he spent time in Istanbul, and became one of the most important theoreticians of the pan-Islamic movement, along with Jamal al-Din al-Afghani. When he was resident in Mecca he influenced the some 2,000 hajjis from Kerala who each year made the hajj. 159

Hadhramis had a particularly large role on the Swahili coast. 160 The career of Sayyid Ahmad bin Sumeyt is typical. His father, Abubakr, was a Hadhrami sharif, born in Shiban, who was a trader and scholar. His son, Ahmad, grew up to be a trader and scholar too. He interrupted his trading to study religion in Grand Comoro under the supervision of his father, who had retired there, and another scholar. Then Ahmad studied in Zanzibar under an Iragi scholar, and was made a gadi in the 1880s. Even so he visited the Hadhramaut three times later to study some more under famous scholars and get their *ijaza*, that is a certification, licence or permit. While away between 1883 and 1886 he spent time in Istanbul and studied with Sayyid Fadhi Basha bin Alwi bin Sahi, a famous Hadhrami scholar. Through his influence he received an Ottoman Order from sultan Abdul Hamid. In 1887 he studied in Al-Azhar, and Mecca, and in 1888 returned to Zanzibar. From then until his death in 1925 he was a very famous scholar and teacher. Students came from all over the coast. Indeed he had an international reputation, for he was asked by the mufti of Mecca himself to settle a quarrel between two Zanzibari *ulama*. Even prestigious scholars in Egypt sometimes sought his opinion, such was his reputation.

Just as these scholars and merchants, and their lineages, were cosmopolitan in the extreme, so also were the Sufi tariqas, arguably the most vibrant and important part of Islam in the nineteenth century, if only because it impacted much more on the common Swahili than did the esoteric work of the scholars. However, there is normally no gap between the scholars, the ulama, and those who belong to a particular tariqa: most scholars were also members. For example, Sayyid Fadl, the important Mapillah scholar, was a member of the Alawi tariqa. However, heuristically it is useful to separate out the two strands. We turn now to Sufis.

The most influential brotherhood on the coast was the Alawi order, a very austere one whose main shrine was at Inat. Late in the nineteenth century a branch of the main Alawi order, the Shadhiliya, won much support on the coast, even as far south as Mozambique. The founder of this branch, Sheikh Ma'ruf, was from the Comoro islands. He did the hajj, and was a sharif. Again showing widespread connections, one of the areas where he was most influential was southern Somalia. He died in 1905 and his tomb in the Comoros is a place of pilgrimage for all the Shadhilis of East Africa.

The Qadiri brotherhood, followers of Abdul Qadir Gilani, were at least as farflung across the ocean as were the Alawi. The legends of the founder have been translated into Swahili as well as Malay and Javanese. During the colonial period the Qadiri network reached from Mecca and southern Arabia along the Somali coast past Brava, Kisimaiu and Lamu to Mombasa, and then via Voi, Nairobi and Kampala into the Belgian Congo. Other lines went to German East Africa, others west through the Sudan to Nigeria and Mali. Their teachings spread from the Hadhramaut ports to Indonesia. Not surprisingly then, some textbooks found in the Belgian Congo were identical to those in use in Indonesia. This was a very rich and important network.

Pan Islam, promoted by the Ottoman Sultan Abdul Hamid II after 1880, had a wide impact on the Muslim world, and frequently was tied in with anti-colonial movements. Notions of Islamic unity, and the centrality of the khalif in Istanbul, were widely dispersed in our area. These ideas were given greater currency by the rulers of Zanzibar. Sultan Barghash had the *khutba* said in the name of Abdul Hamid. Sultan Ali (1902–11) himself

visited Istanbul, and also named the Ottoman sultan as khalif in the Friday prayers in Zanzibar, and even on the mainland after the Germans took it over. Zanzibar also had a pan-Islamic newspaper.

This was a reciprocal matter, for some East African scholars spent time in, and were influential in, Istanbul itself. The important Zanzibar scholar, Ibn Sumayt (or Bin Sumeyt), spent a year in Istanbul and studied with his fellow Hadhrami scholar Fadl b. Alawi, who was one of the theoreticians of the pan-Islam movement. Yet when World War I broke out the flimsiness of the ties to Turkey were revealed, as indeed they were also in India and in the Hijaz. In the former the khilafat movement met with little success, while in the latter the sharifian dynasty in Mecca and Medina opted for the Arab Revolt and the Allies rather than the Ottomans and their German allies. Once the Ottomans entered the war on the side of the Germans and Austrians, they called it a jihad, but very few in East Africa were impressed. Many contrasted harsh German rule in the area with the more lenient British rule in Kenya. The Sultan of Zanzibar issued a declaration hostile to Germany and also to Turkey. This is hardly surprising, given that he was essentially a pensioner of the British.

Colonial rule from the late nineteenth century interacted with these various tendencies and influences from outside. It involved speedier communications, and the widespread dissemination of ideas via the printing press. Textbooks for prayer sessions printed in Egypt, Mumbai, Singapore and Penang have been found in Jakarta, Mombasa and Dar es Salaam: an important link all around the ocean. Texts for Shafi'i law were published in Swahili, Malay, Javanese and Amharic.

Possibly the main response of Islam to the colonial challenge was an increasing emphasis on the life of the Prophet (sometimes indeed he was presented as an African, and the leader of resistance to the westerners) and especially of his birthday, that is the Mawlidi festival. Celebrations to mark the birthday of the Prophet take place in most of the Swahili stone towns. The most famous of these celebrations takes place in Lamu, and its popularity there demonstrates yet again the widespread connections of the Islamic world in our century.

The end of colonialism, and the Islamic revival, have produced new trends in East African Islam. In Kenya, and to an extent Tanzania, the Swahili are now marginalised, considered to be collaborators with the slave trading Omanis and then with the western colonial rulers. In the face of this, some lineages 'are now picking up on their Yamani or Umani patrilines where they can and going to Jeddah, Mecca, Muscat, Dubai and Abu Dhabi.'161 Others, no doubt the less prestigious with no kin ties to the outside, have turned to Islam as a positive force and reaffirmation of a Swahili identity. Some have even converted to shi'i Islam, this being considered to be more militant. In Zanzibar the anti-Arab revolution of 1964 led to a period of downplaying of any foreign influences, but more recently, in 1985, an Omani consulate was set up, significantly not in the capital of Tanzania, Dar es Salaam, but rather in Zanzibar. Around the same time discontent with what was perceived to be an anti-Islamic mainland regime led the island to join the Organisation of Islamic Countries. Following a great outcry from mainland Christian politicians, this decision was reversed in 1993.

These connections continue to today, most obviously via the greatly expanded hajj, but in other ways also, ways very similar to those we have described for the past. As just one example, the Swahili Muslim population in Kenya has been strongly influenced in recent decades by the push towards normative Islam, sponsored especially by contact with and people from Saudi Arabia. Some young Kenyan Muslim leaders have trained at the University of Madina. The hijab is increasingly seen in Kenyan schools. Similar trends have been found in Tanzania and Uganda. In Uganda the largest missionary movement in the world, the Jama'at Tabligh, is very active and influential. Originating in the Indian subcontinent, it is highly significant that its focus is on the existing Muslim community. As with many other revivalist movements today, it wants the Quran and shariah to be the only guides to conduct, and the basis of all legislation. 162 Similar trends are obvious all over south and southeast Asia. One visible sign is the many mosques and *madrasas* (religious schools) funded by money from oil-rich Arab states. Yet the process whereby orthodox, normative, Islam triumphs is far from complete: to revert to earlier terminology, these authorities have not yet completely eradicated additive change and achieved substitutive change. In Mayotte, a surviving French possession in the Comoro Islands, everyone is Muslim to be sure, but many also are spirit mediums. To avoid what seems to be inevitable conflict between the two, when people are setting off to go to a spirit ceremony they take off their amulets which contain Quranic passages. 163 Even the most vigorous rectifier from the Hijaz will find it hard to eliminate completely this sort of flexibility, a cohabitation of normative Islam with older informal beliefs.

Hadhrami and other religious guides also operated in Indonesia, and indeed continue to do so to this day. Ann Bang describes how the Naqshbandi Sufi order in Indonesia recruited a mass following in the early nineteenth century. Their practice, not unusually for Sufis, incorporated pre-Islamic practice to an extent: the recitation of the dhikr, for example, was believed to make the devout invulnerable. In the second half of the century these 'unorthodox' practices came under attack from a source which we have encountered many times already, namely Indonesian scholars who had been educated in the heartland of Mecca and then came home to rectify the religious practice of their Indonesian fellows. The famous Dutch orientalist Snouck Hurgronje gave an account of these efforts in Aceh, where religious mysticism was very popular. A particular reformer started a crusade against such deviations as cock fighting, opium smoking, gambling and pederasty.

What seems to be different about reform and purification movements in Indonesia as compared with the Swahili coast is that much of the impetus in the latter came from men from outside, especially Hadhramis, or at least people who though originating on the coast had studied in Hadhrami madrassas. In Indonesia it seems that local people who had studied in Mecca played a much larger role than did men from outside, whether from Hadhramaut or elsewhere. The career of Sayyid Uthman, born in Jakarta in 1822, is revealing. He was of Hadhrami stock, though his father lived in Java. He studied in the Hadhramaut, and travelled widely. Back in Jakarta in 1862, he led campaigns against innovation and acculturation. However, his influence seems to have been very largely restricted to his fellow Hadhramis in Java; local Muslims were less impressed. 164

This in turn signals that we should not too glibly write about a Muslim 'community' all around the shores of the Indian Ocean. There were pronounced divisions within the community, based on religious practice,

that is adherence to different schools of law, or to different Sufi orders, and on ethnicity. One example that we have already noticed is that the Hadhramis follow the Shafi school, but this is not followed in many other areas around the shores of the ocean. In India, for example, the dominant legal school is the Hanafi. In general Arabs from what they proclaimed to be the heartland, that is the Hijaz and southern Arabia, especially Hadhramaut, kept some distance from local Muslims in other areas, be this the Swahili coast, or India, or the Malay world. Children whose parents hailed from these areas were often sent home to study. Sometimes wives were taken from home, rather than intermarry with local women, or at least the main wife would be of Arab stock even if secondary ones were locals.

Chapter 8

History in the ocean

We have just written of people travelling widely around the ocean to propagate new religious ideas, and to purify the faith. Earlier we also wrote of people moving over the ocean for economic reasons, that is the dubiously voluntary movement of indentured labour (see pages 223–4). There was however also completely voluntary movement, one example being the Indian financiers, or agents of home-based financiers, whom we found dominating much of the imperial economy of the Arabian Sea in the late nineteenth and early twentieth centuries (see pages 219–20). This movement continued, and we can now move forward into the twentieth century. In the first half of the century we will find many trends similar to those already outlined in the previous chapter; independence after World War II marks something of a break, though arguably the later phenomenon of globalisation had a greater influence on the ocean. We will first look at more recent migratory movements across the water, this time for economic reasons.

Hadhramis propagated and consolidated Islam, but many travelled for more secular reasons. Some moved to India. There was a big influx to the largest of the Princely States, Hyderabad, in the nineteenth century. Some did well out of turning themselves from military mercenaries to land controllers: indeed three of them made so much money that they were able to go back home and found minor sultanates. During the Indian Rebellion of 1857 they rejected calls to help throw out the infidel British, saying that 'we have come here to make money and not to fight about religion.'1

Other Hadhrami drew on their traditional mercantile and financial skills to acquire prominent roles in the service sector all around the ocean. In the mid 1930s about 110,000 Hadhramis lived abroad, this being nearly one-third of the total population of the area. Today they have largely given up on their previous destinations of Indonesia, Malaya and East Africa, and instead work in Saudi Arabia and the Gulf states. Others have moved to the

west, often moving on from Indonesia, where they are worried about political instability. Nor are the Hadhrami the only ones who have done well in the service sector. Two Gulf families did well operating in the interstices of the British system, classic compradors. The Kanoo family serviced the British in the Gulf before World War I, and became the representative in Bahrain of the Anglo-Persian Oil Company, and of the Mogul steamship line. Later they got into pearls, and later again worked for ARAMCO. Another family, the Alghanim, have prospered in Kuwait, basing their role on their closeness to the al-Sabah ruling family. Their present head, typically, received his business training in the United States.3

We have described large-scale movements of Indian and Chinese labour in the nineteenth century, with Chinese going mostly to the Malay world, and Indians all around the ocean from Malaya to South Africa. In recent times many of the descendants of these migrants have acquired important roles in the economies of the independent states. Chinese dominate the economy of Malaya, and play a major role in Indonesia. The population of Mauritius is now 52 per cent of Indian origin, and they dominate both the economy and politics of the island. All of these diasporic communities retain close family and business ties with their fellows, both those in the diaspora and those at home in Arabia, China or India. Indians used to have a large role in East Africa, but they have been discriminated against, and even expelled, from several former colonies after independence: Burma, Kenya to an extent, Uganda most notoriously. They have been forced to move on, to the west, or back to India. This secondary diaspora is now one not of indentured poor labour but of people who often are professionals or have considerable economic power. Again then, this is not so much a diaspora as a circulation of Indians.

Meanwhile more humble movement for work continues. The experience of people from India and Pakistan in the oil rich Gulf of the 1970s and 1980s provides a case study. In 1977 there were 140,000 labour migrants from Pakistan in the Gulf area, while in 1981 there were 276,000 Indians in Saudi Arabia. Many of these came from the west coast of India, from Goa or Kerala. In the mid 1980s Indian and Pakistani workers together sent back home about \$US 6 billion, a very useful amount of foreign exchange.4

In his classic account *In an Antique Land*, Ghosh found in Kerala ports which had once been prosperous. Mangalore was lauded by Ibn Battuta, and by the Portuguese Barbosa. Then it fell into decline as the British passed it by. But more recently men from one village which is part of the larger town have worked in the Gulf and prospered; 'everything around us, the well-tended gardens and the pastel-coloured bungalows with their thickets of TV aerials, spoke of quietly prosperous, suburban lives.' In other parts of Kerala Ghosh found 'large houses, some new, with sharp geometric lines and bright pastel colours that speak eloquently of their owners' affiliations with the Persian Gulf.' Later he commented on 'a small cluster of Gulf-gilded houses.'5

The example of people from Goa in western India is in many ways typical. We are writing here about the Christian part of the population, not the Hindu. People from this enclave have migrated for centuries, long before it became part of the Indian Union in 1961. Indeed, ironically as the old Goans move out or back and forth, a flood of migrants from other parts of India has changed completely the whole aspect of Goa. Migration from Goa was and is encouraged by the poverty of their homeland, and by their having been converted early on by the Portuguese to Roman Catholicism. The result was that they had none of the food taboos which limited both Hindus and Muslims: Goans could cook any sort of food for anyone, hence their prominent role as cooks and stewards on western ships. Goans also, as a result of a long colonial experience, were more 'westernised' than most other Indians, and so could serve as nursemaids, musicians, and so on. The widespread network of the Catholic church provided support, advice and spiritual comfort wherever a Goan ended up. Christian Goans were alert to wider changes in the Indian Ocean area. In the mid-twentieth century many more attended English language schools in Goa than those teaching the Portuguese of the colonial masters.

This expedience has meant that Goans have had several different favoured places to migrate to. In the eighteenth and early nineteenth century the focus was on the other Portuguese colonies, especially Mozambique, where they and other Indians controlled the economy. Later in the nineteenth century British India was the El Dorado, along with other British colonies in East Africa. In 1921 it was estimated that Goa's population was about

470,000, with another 200,000 living outside. For the last few decades the movement has been to the Gulf states. Today there are sizeable communities in such South Asian cities as Mumbai, Pune and Karachi, and further afield in Nairobi, Kampala, Dar es Salaam, Bahrain, Abu Dubai, and even in London, Lisbon, California, Toronto and Sydney. The village of Moira is perhaps typical. A researcher in 1980 found that half the population were Catholic, and of these 85 per cent got cash income either from remittances from those overseas, or from the superannuation of those who had returned. Thirty years ago one would drive around Goa and the locals would point out the large houses of people who had been chief stewards, or cooks on British ships. Today the even more elaborate new houses belong to families working in, or returned from, the Gulf, just as Ghosh noted a little further south. This hints at the way Goans, and other diasporic communities, circulated, being away much of the time but retaining strong ties with their homes and villages of origin, sending back money and hoping to retire there. In particular, Goan women over the last two centuries have been major travellers across the ocean. In this they contrast strongly with the more typical movement of men, whether Muslim or Hindu, who leave their family back home. Goan women often accompany their husbands when they go to work overseas, but come home frequently to visit parents, go to family weddings and funerals, arrange husbands for their daughters, deal with property, or attend important religious occasions such as the exposition of the preserved body of Goa's patron saint, St Francis Xavier.

These Goan women make up only one thread in the rich tapestry of people travelling around the ocean. Another is petty traders, pedlars, people who travel incessantly, chaffering their way around the littoral. Literally for millennia these people, at least by number, are the main travellers on the ocean. Some have regular routes, like transhumant pastoralists on land, others go wherever there is opportunity. By 1877 Singapore was a thriving colonial port, the crucial hinge between the Indian Ocean and the South China Sea. Yet it also played host to a regular arrival of humble pedlars. Lady Brassey noticed them:

Towards the end of the south-west monsoon, little native open boats arrive from the islands 1,500 to 3,000 miles to the southward of Singapore. Each has one little tripod mast. The whole family live on

board. The sides of the boat cannot be seen for the multitudes of cockatoos, parrots, parrakeets, and birds of all sorts, fastened on little perches, with very short strings attached to them. The decks are covered in sandal-wood. The holds are full of spice, shells, feathers, and South Sea pearl shells. With this cargo they creep from island to island, and from creek to creek, before the monsoon, till they reach their destination. They stay a month or six weeks, change their goods for iron, nails, a certain amount of pale green or Indian red thread for weaving, and some pieces of Manchester cotton. They then go back with the north-east monsoon, selling their goods at the various islands on their homeward route. There are many Dutch ports nearer than Singapore, but they are over-regulated, and preference is given to the free English port, where the simple natives can do as they like so long as they do not transgress the laws. 7

On the other side of the ocean, in the Comoros, we have been left an oral tradition to do with the origins of the leading Indian merchant family there. So much of his story is familiar to us; it could stand as a pattern of life beneath the imperial umbrella. Hadji Yakub Ismael was born in Gujarat, in Kutch Mandvi, and was from a family of cloth merchants. Undercut by European machine-made cloth, he was forced to travel, first to Zanzibar, then to Iraq, Madagascar, and other parts of Africa. Zanzibar was his base for many years, but once he was blown off course and ended up in one of the Comoro islands. He saw opportunities. Returning to Zanzibar, he loaded up with cloths (that is, manufactured goods) and in Grand Comoro exchanged them for sisal, coir and other primary products. This was in the 1880s. Much later, when the French acquired the islands, he had extensive dealings with them, but he also continued to travel and trade up and down the East African coast and offshore islands.8

Alan Villiers sailed on a dhow in 1938–39 on what seems to be a typical peddling voyage. Essentially it went where there was opportunity, and where the monsoons would let them go. It set off in August 1938 from Kuwait, and went to Basra to get dates for Mukalla. On the way they called at Muscat. From Mukalla it went on to Aden to take on goods and passengers, then back to Mukalla for more of the same. They then set off for Africa, and did some smuggling at Haifun, in northern Somalia. There was no trade in Mogadishu, so they went straight on to Lamu and Mombasa where cargo and passengers were landed, then to Zanzibar where they arranged to load mangrove poles in the Rufiji delta, then to Zanzibar again

and finally back to Muscat and so to Bahrain, where the mangrove poles were sold. They got home to Kuwait in June 1939.9

A recent example was a fleet of eleven prahus found off Ashmore Reef in north-western Australia in 1968. They were collecting trepang, clams, various other fish, and trochus shells. Based in Madura, they had sailed around east Java peddling bits and pieces. After leaving Ashmore Reef, hopefully with a full cargo of dried fish, they intended to go to Makassar via Timor, and sell the whole cargo in exchange for coconuts and copra to sell in Surabays, after which they hoped to get back home to Madura. The whole voyage usually would take five lunar months. This sort of pattern goes back some centuries at least, certainly long before white colonisation in Australia. 10

Beneath the imposing imperial edifice there were also westerners who travelled and did the best they could. Somerset Maugham travelled widely in the 1920s, and always had something acute, or mordant, or supercilious, to say about his fellow passengers. On a trip from Bangkok he 'soon discovered that I was thrown amid the oddest collection of persons I had ever encountered. There were two French traders and a Belgian colonel, an Italian tenor, the American proprietor of a circus with his wife, and a retired French official with his.' The circus man was another pedlar. He had spent twenty years travelling up and down the East from Port Said to Yokohama – Aden, Mumbai, Chennai, Kolkata, Rangoon, Singapore, Penang, Bangkok, Saigon, Hue, Hanoi, Hong Kong, Shanghai. Soon after, on his way from Haiphong, he met another American, this one a Jew (some gratuitous anti-Semitic remarks follow) who travelled in hosiery and had gone from Jakarta to Yokohama for twenty years.11

We have looked at a variety of people travelling on, or living near, the ocean; we have spent a lot of time describing life aboard the great liners. However, there was and still is another layer below the commanding heights of the P&O, and we can now turn to this level. We are dealing with tramp steamers, and local ferry boats. There is a marked ebb and flow of the ownership of these lower level craft. To World War II the larger ones, the tramp steamers let us say, were nearly all owned by people from outside the ocean, but after independence this changed. Yet even today much of the

traffic in the ocean is generated by foreign registered ships. Taking account of the merchant fleets of all the countries around the ocean (and thus excluding China and Japan) there has been some renaissance since 1945. In 1939 these countries had about 185,000 GRT out of a world total of 58,000. By 1957 it was 879,000 out of 110,000, by 1971 it was 5,324 out of 247,000, and by 1982 it was 27,000 out of 424,000.12 The conclusion is presumably that from a lamentable base of total subordination, the region has made some progress, but much remains to be done.

Frank Broeze was the great authority on Indian shipping in the modern period. He shows how India between the two world wars was able to make some progress, as the British slowly relaxed some of their control and allowed at least a little competition. The Scindia line was founded in Mumbai in 1919, and given some access to coastal trade. Equally important, the company began to train, in India, its own engineers, rather than relying on British expertise. Yet even so the important Government of India Act of 1935 specifically forbade any discrimination by India against British shipping. Even by 1939 there still had been no agreement to allow Scindia to have half of India's coastal trade, let alone any to Europe or Japan. At the outbreak of World War II India had 132,000 GRT of shipping, less than 0.2 per cent of the world's total, and 120,000 of this was owned by Scindia. At this time traditional craft probably totalled roughly the same tonnage.13 Some progress has been made since then. By 1983 India had shipping of 6.24 million GRT; on the other hand the country was, compared with Japan or Singapore, very late to enter the container age.

We can survey Indian Ocean shipping in the twentieth century by going down in size, starting then with substantial passenger and cargo ships, and ending with traditional sailing craft. We will concentrate on passengers again, with economic data to do with cargoes and cargo ships being covered later in this chapter.

One way to get into the subject is to consider the journey of the English journalist Gavin Young, who set off in August 1979 with the aim of travelling from Europe to Guangzhou by sea. It took seven months and was a very difficult task. He had to travel by land quite often, for he found that on some sectors of his route there were only cargo ships now, whereas

before World War II, or even ten years previously, he could have done the whole route by passenger ship. It is revealing that he used the ships of Swire and Sons line sometimes, but by 1979 they had almost no passenger-cargo ships, as airlines had taken over. This shipping company, significantly, at that time also owned the Cathay Pacific airline! 14

Somerset Maugham in the late 1920s travelled on a typical humble cargopassenger ship from Bangkok.

I left Bangkok on a shabby little boat of four or five hundred tons. The dingy saloon, which served also as a dining-room, had two narrow tables down its length with swivel-chairs on both sides of them. The cabins were in the bowels of the ship and they were extremely dirty. Cockroaches walked about on the floor and however placid your temperament it is difficult not to be startled when you go to the wash-basin to wash your hands and a huge cockroach stalks leisurely out. We dropped down the river, broad and lazy and smiling, and its green banks were dotted with little huts on piles standing at the water's edge. We crossed the bar; and the open sea, blue and still, spread before me. The look of it and the smell of it filled me with elation. 15

Fifty years later Young had a similar passage, one that brought back to him the same Maugham. He was on the 1,400 ton *Perak*, going from Singapore to Kuching. He found his cabin.

Somerset Maugham would have been satisfied; a bunk, a dressing table and mirror, a wardrobe, two armchairs covered in white leatherette and a stool. The two portholes were square wood-framed windows with curtains; a thermos of ice water hung in a wall bracket, and on the ceiling a large fan rotated inside a cage designed to protect abnormally tall passengers like myself from a scalping. I took my copy of Maugham's Short Stories out of my bag and laid it on the dressing table, where it looked at home.

Young was the only passenger, therefore rather a relic, as also the 'Information for Passengers' on his cabin door, which said 'There is normally a quiet period at sea when passengers, and also officers off duty, may be resting. If parents would be kind enough to aid in maintaining this atmosphere, it would be very much appreciated.'

This was part of a dying trade. Young had earlier gone from Chennai to Port Blair, in the Andamans. He went on a substantial Shipping Company of India boat of 10,300 tons, with 950 passengers. Young got breakfast in the spacious dining room, 'cornflakes, eggs, bacon, Madrasi cakes with curry

sauce.' After Port Blair he went on to Kolkata, again on a modern Shipping Co. of India ship, and enlivened a very pleasant voyage by checking the complaint book, finding such gems as 'I am glad to certify that the service given me by the staff is really good. I feel just homelike comfort and this is due only from their sweet association.' Others complained of 'certain indecent and unruly passengers in drunken condition' and that 'Stewards attend cabins at their own whims and favours. Passengers boarding ship should be instructed about correct methods to use heads, and socioeconomic conditions keep some in dark.'16 Today Port Blair can only be reached by air from either Chennai or Kolkata. So also in the Arabian Sea, where the regular Mombasa–Mumbai route has vanished in favour of air travel. Western travellers used to end their odysseys with voyages on precarious passenger ferries in Indonesia. These continue to ply their way from island to island, a reflection obviously of the fact that Indonesia, being all islands, is much more hospitable to the continuance of this mode of transport. For a time small steamers went from Chennai to Penang and Singapore, mostly carrying Tamil and other Indian settlers to and from Malaysia. This route survived for a time because the passengers usually had very heavy baggage, too much to take by air.

The end of passenger ships has also occurred on coastal routes. The preferred way to get to Goa from Mumbai used to be a ferry which spent a leisurely day chugging down India's west coast for a picturesque dawn arrival at the estuary of the Mandovi. Gavin Young did this trip in 1979. Nearing Goa he wrote about

Bingo in the second-class dining room. The second officer calls out the numbers to a packed and sweating audience bent over slips of squared and numbered paper. 'Grandmother's age – eight zero . . . Republic Day – twenty-six... Punjab Day – number five . . . a round dozen – number twelve. . . Hockey sticks – seventy-seven.' Sikhs played cards on the perfectly scrubbed deck; Indian families made little picnics. Hippies peeled oranges, slept or studied pornographic pictures in sex magazines. Four miles away the green coastline moved by. On time, Captain Kadir brought the ship into Goa in a blue morning mist, passing through a fleet of trawlers with light roofs. 'We're going right inside,' he said, like a surgeon announcing his next probe. An old fort, a white church, land becoming reddish and lumpy, a line of broken water under a cliff.

He was told that the route was no longer profitable. True enough, the steamers stopped, to be replaced by a jet cat, which also failed. It was felt not to be picturesque enough, and one had a bumpy ride usually out of sight of land. Those on the aisle seats had packets of vomit from those sitting alongside them passed across to be collected by stewards. Goa can now be reached only by plane or train.

We can trace the career of what may be a typical humble cargo ship, thanks to some devoted amateur research. The ship in question operated for years off the Western Australian coast. It was of 2,425 tonnes, built in Sunderland, and in 1892 started life named the SS *Darius*. After years in the Indian horse trade from Australia, it was bought by the Western Australian government in 1912 and given an Aboriginal name, the *Kwinana*. From this time it shunted back and forth up and down the coast, taking general cargo to northern ports, and bringing back live cattle from the Kimberley region. Sometimes it went as far as New Zealand, South Africa and China, with cargoes of hardwood and sandalwood. In the eight years to December 1920 it had made an impressive total of ninety-six voyages from Fremantle. Then it caught fire, was declared of no further use, and was subsequently used for explosives training. Such a humble and undramatic career must typify the bulk of trade and shipping around the shores of the ocean.18

Steam, as we have commented already, was not and still is not totally dominant. Sailing ships still have some role. In 1979 Gavin Young sailed from Colombo to Tuticorin on a schooner, a 'great heavy-timbered three-master' of 220 tons. There was no engine, and indeed they were becalmed for a time. 19 Arriving in Tuticorin Young found a fleet of about forty-seven seagoing thonis, some up to 500 tons, and no engines. They took salt and fertilisers to the west coast, coming back in ballast. From April to August they took imported wheat, fertilisers and rice up the east coast to Chennai and Kolkata, and they also went to Colombo. The high cost of diesel meant they were still viable. So also in Saurashtra, where there has developed a booming business making 400 tonne wooden ocean-going vessels. 20

The main survivors are the famous dhows, whose partial demise has attracted endless attention from romantic westerners. Alan Villiers in 1939 wrote a somewhat premature requiem:

In the great days of the Arab navigators, Arab dhows covered the eastern seas; now it was half a century since one had rounded the southern tip of Ceylon. Ancient methods, the old instruments, the old mathematics — in which the Arabs had so long excelled — all these were lost, and nothing had come to take their place, nothing but discarded steamship compasses bought in a junk-yard in Bombay, and uncorrected out-of-date Admiralty charts. Yet the Arabs still sailed, though they had lost much of their knowledge and some of their glory. Their voyages consisted largely of petty coastal trading and smuggling. 21

It is true that traditional sailing ships have lost much of their role. In Aden in the early 1960s on average about 6,000 ships called each year, with total net registered cargoes of about 30 million tons, and on average 1,400 dhows, total cargoes about 135,000 net tons.22 Yet it is appropriate to make the point that the broad category of ships called dhows has always changed. Nails began to replace coir some centuries ago, different woods have been used depending on availability, and some modern navigation methods have been adopted. Most important, today virtually all dhows have engines, though usually for reasons of cost sail is used when the winds are favourable. Prados showed how some types of dhows have changed and so displaced other types. He concentrates on the Yemeni types known as huri and sanbuq. These have got bigger and more efficient. The 'lack of dimensional constraints, coupled with the growth in seafood popularity – resulting from increased refrigeration capabilities to improved road networks – has pushed the huwari to greater proportions.' The result is that 'the modern sanbug may be as responsible for the extinction of traditional, regional vessel types as the steel freighter and glassfibre launch.' Among the changes he describes are the use of paint to avoid fouling of the hull, as compared with the traditional method of smearing every two months or so a combination of boiled animal or fish fat and crushed lime. A shortage of trees has meant that boats made of planks, rather than dugouts, are now the norm. Nearly all boats now have transoms on which to mount outboards, they go out fishing for longer, and preserve the catch for a few days in fibreglass boxes with ice. Different woods are used: instead of teak, pine is often used, or a sort of red hardwood called zinjil. Wider connections are revealed when we find that the former comes from Italy or even Sweden, the latter from India or Java! Even the last of the sewn craft used nylon thread rather than coir, and had a transom for an outboard.23

On the East African coast dhows, in this case more correctly jahazi, ended their trade to the Gulf in the 1980s. The cargoes had been mangrove poles, and this trade declined due to environmental concerns. But some are still being built, and they trade today up and down the coast, some carrying passengers and many doing some smuggling.24 In the Gulf both local and ocean-going dhows are now motorised. Some carry pilgrims, some dates. The motors have cut passage times in half, and also the sizes of crews. When only sail was involved large numbers were needed to handle unwieldy lateen sails, and others came along partly as passengers who wanted to do petty trade, and would help out with the sailing as needed.25

The centre of the dhow trade today is on the west coast of India. Dhows here remained viable because they focused on smuggling restricted goods into India in the years when the Indian economy was closely regulated, that is up to the late 1980s. The dhows involved, about 45 feet long, looked small and scruffy, perhaps deliberately so, for they usually had two large and powerful engines. Large amounts of gold came in from Dubai each year. In 1981 an Indian dhow was caught smuggling from the Gulf to India. It had a cargo of no less than 8,807 Japanese and Swiss watches. Other dhows carry humble products, such as timber and building materials, from say Kerala to Mumbai: in 1976–77 the number of dhows entering Mumbai was 13,436, mostly coming from somewhere else on the west Indian coast.26

The centre of dhow construction today is also on the Indian west coast, for here they can be built much cheaper than elsewhere. In Oman in 1978 Martin found that a shu'i of only 20 tons cost \$US21,000, and the motor another \$5,000. The hull, cabin and toilet were of teak from India, the mast was dakl wood from Malabar, and the interior used mango wood from the south Indian coast. These boats were used for fishing, yet at this time, in the late 1970s, one could buy a 12 foot aluminium boat with an outboard for \$900. Oman then clearly had priced itself out of the market, as indeed had the Gulf generally. The main centre in India is located at the estuary of the Beypore river, 10 km south of Calicut. Teak logs are floated down from inland to make the hulls. The clients however are mostly Arabs. In 1978 Martin watched them building a boom of 500 tonnes for a Kuwaiti merchant. The cost was \$US63,000, without an engine, and construction

took 18 months. This is obviously considerably cheaper than the cost of construction in Oman. 27

In the Malay world sailing ships survive in certain niche areas. In eastern Indonesia there are still many working praus, most of them now with engines, though there also are engineless sloops called lambo.28 While even in 1884–1910 steamers carried more than 95 per cent of the traffic in Indonesia, praus continued and continue to feed in to the major steamer routes, just as they do on the Swahili coast also, and some continue to peddle their way around the islands.

Two recent accounts of voyages on dhows give some impression of travel today, which could be put alongside Villiers' classic narrative. Gavin Young went on a 60 foot cargo dhow called the *Al Raza* from Dubai to Karachi. The crew were all Baluchi, including the nakhoda, except for one old Iranian and the helmsman, who was Indian born. It had a 380 hp Japanese motor, which however was very erratic, so that they cannibalised the motors of the cars carried as cargo to fix up the dhow motor. Later the dynamo on the dhow engine failed, so they had to run the engine of one of the cars all the time to generate electricity to run lights.29

In the mid 1990s Mackintosh-Smith went from Yemen to Suqutra in a new ten metre, six ton sambuk, with a total number of passengers and crew of twenty-three. The vessel was teak below the waterline, but the rest was cheaper hardwood, and the deck was pine. The voyage took two nights and one day. The deck was crowded with boxes, oil drums, ropes and anchors. The nakhoda, Salim, set up a rudimentary compass, in a box secured by being nailed into the deck. However, he knew the stars well, and also steered to take account of currents. The vessel had a 33 horsepower Japanese motor, and the lateen sails were used only in emergencies. By sail the voyage would have taken at least five days.30

Islands should be seen as the quintessential maritime locations. Horden and Purcell, writing about the Mediterranean, claim they are not really the stereotype of being isolated and remote: rather they have all-round 'connectivity'. They are especially accessible to the seaborne, and in a way are coastal areas writ large. Richard Grove wrote of Indian Ocean islands as 'Edens' where new European ideas about nature and conservation were

stimulated.<u>31</u> Several of the themes we have touched on earlier are exaggerated and magnified when we look at them in an island context.

Many of the islands were uninhabited until Europeans arrived and used them for plantations, especially sugar, but also coffee, tea, spices, coconuts. The colonial powers brought in labour: at first black African slaves, and then indentured labour. This has often bequeathed to the islands at independence complex social problems, as in Mauritius where the majority of the population are descendants of people from India. Relations between them and the creole population are often tense. There was also tension in Zanzibar, until the old Arab elite was dispossessed in the revolution of 1964. In Madagascar the Merina people of the highlands, descendants of Malayo-Polynesian migrants, remain separate from the coastal people of African descent. There also have been massive ecological changes in the islands. Native woodlands have been replaced by plantation crops, and this has often led to erosion; feral dogs and cats have destroyed native wild life; pigs and monkeys, along with humans, rendered the dodo on Mauritius extinct by the 1670s. So also with the giant tortoise of the Seychelles, or nearly so. Sugutra has been isolated for much of its history until recently. Today the dragon's blood tree, source of a resin once widely used in medicine as an astringent, is threatened with extinction. There are no young trees on Sugutra today, because of livestock grazing.32

Proceeding roughly west to east, and south to north, Zanzibar was ruled by Omani sultans through the nineteenth century, though British power increasingly intruded on their autonomy. Society was thoroughly stratified, with a ruling elite who claimed Arab origin. Below them were Muslims who could not convincingly claim Arab descent, and below them descendants of slaves. But the commercial sector, including many government posts, was controlled by Indians, usually Muslims of some description and hailing from Kutch. Zanzibar became independent in 1963, and in 1964, after a bloody revolution, merged with Tanganyika to make the new nation of Tanzania. The revolution displaced the Arab elite, and both they and the Indians often chose to leave. Here and elsewhere a situation owing much to the past wishes of the colonial powers, in this case Britain with its indirect control, left a precarious situation at independence.

Madagascar perhaps should not be considered as an island, for it is larger than many landed states. We can merely point out that the island, ethnically very diverse, was a French colony from 1896. Its history since independence in 1960 has been a chequered one, and now the World Bank and the International Monetary Fund play something of a colonial role in 'advising' the various governments on their economic and social policies.

The four main islands of the Comoros again contain strong ethnic divisions. When Arabs arrived a millennium ago they found a population divided between Malayo-Polynesian people and Swahili-speaking Africans. These divisions produced a situation where one of the four, Mayotte, was mostly populated by Malayo-Polynesian people who had come from Madagascar, as compared with the other three, who had the same Afro-Arab mixture as the Swahili coast. France took over all four islands in the late nineteenth century, but at independence in 1975 Mayotte chose to remain part of metropolitan France. The recent history of the other three has been a turbulent one, with several coups and mercenaries sometimes playing a deciding role. The Comoros, like Zanzibar, have often stressed their Islamic credentials. In 1993 the three islands became a member of the League of Arab States.

Both the Comoros and Madagascar had been settled long before the Europeans arrived in the Indian Ocean, and this contrasts strongly with the next set of islands we will look at, which were uninhabited. These are the Mascarene islands: Reunion, Mauritius and the Seychelles.

The Portuguese visited Mauritius in the sixteenth century, and the Dutch twice tried to establish a settlement colony there. However, permanent European control came only when the French took the island in 1721. They quickly established sugar plantations, and brought in large numbers of African slaves to work them. In the late eighteenth century the population consisted of 6,000 whites, 3,700 free people, most of whom were Indian, and nearly 50,000 slaves. Britain took the island in 1810, during the Napoleonic wars, and in 1835 abolished slavery. Over the next eighty years some 450,000 indentured Indian labourers were introduced. The island became independent in 1968. There are strong ethnic and religious divisions. Over half the population are Indian Hindus, about 30 per cent are

creoles and Europeans, 16 per cent are Muslim, and about 3 per cent are of Chinese-Mauritian background. The sugar economy, in effect *the* economy for some two centuries, is still dominated by a Franco-Mauritian elite, at least in the large estate sector, but Indian and creole small-holders are numerous. Some 90 per cent of the island's cultivable land is under sugar.

While there certainly is some tension between the various groups just depicted, some have claimed that because everyone is a relatively new arrival, with no indigenous population, this is a relatively successful multicultural society of about 1,000,000 people. The linguistic situation reflects this, for the formal languages are English, French and standard Hindi, but the domestic languages are Mauritian Creole and Mauritian Bhojpuri. 33 Most people speak three or four languages. The political system is more or less open and free.

This relative harmony is at least in part based on the way the economy has been able to make a transition from total reliance on just one export crop, sugar. Tourism, as we will see, has expanded rapidly, and more generally the government hopes that the island will become an Indian Ocean Singapore. To this end in 1970 they set up Export Processing Zones where textiles are produced: sugar now makes up only 23 per cent of export earnings. Investment in the zones was encouraged by such inducements as the forbidding of strikes, free repatriation of profits, and a ten-year income tax holiday. As a result foreign investment rose from \$US11 million in 1998 to \$US 47 million in 1999. Yet any export product can suffer fluctuations: in 1988 the European Union, which had provided guaranteed access for Mauritian textiles, decided that they were too successful, and restricted imports from there.34

Reunion hosts an equally complex mix of peoples. The island, along with the rest of the Mascarenes, was taken by the French. The British took all three of the areas early in the nineteenth century, but at the end of the Napoleonic wars gave Reunion back to France. It is now a Department of metropolitan France. The population includes people descended from migrants from Europe, Africa, India, China, Madagascar and Comoros. As in Mauritius, the sugar industry initially used slave labour, and later indentured Tamil Indians, who today make up about one-sixth of the total.

Being part of France is a mixed blessing. On the one hand it means a large tourist influx, and a guaranteed market for sugar. On the other hand, wages are the same as in metropolitan France, and obviously then Reunion cannot compete with cheaper labour in the other islands. Consequently industry has failed to develop.35

The mixture of religions in Reunion is both complex and interesting. The Tamil labourers were mostly low caste, and in the nineteenth century the French authorities actively encouraged conversion. As coercion eased in the twentieth century an interesting mix of Catholic and Hindu practice became evident on such occasions as baptisms and marriages. One example of a tolerant folk religious practice on the island where all the different communities could sometimes embrace the same cult figure is St Expédit, whose career was sketched earlier (see pages 244–5). But as regards the Hindu population, over the last few decades this rather tolerant situation has changed, as Tamil Brahmins have come in and actively sought to purify Hindu practice on the island. Over just a few years they have been more successful in eradicating folk Hinduism than were the Catholic authorities over a period of more than a century. As an example, in the old syncretic time most Tamil families gave their children a western first name, often John or Mary. However, the first letter of the second name was chosen according to Hindu astrology to give the child an auspicious name. Today young Indian parents choose an Indian first name for their child (rejecting the Christian influence once in force) and without taking account of the first letter of the name according to the date of birth (rejecting previous folk Hinduism).36

We need to say little about the last of the Mascarenes, the Seychelles, for their history is analogous to the other two areas. Again there were slaves and sugar and then indentured labour. However, many of them returned home at the end of their indenture, and those who remained seem to have integrated much more than occurred in Mauritius. This however does not apply to the free Indian migrants after the end of indenture, who dominate business, and unlike the small Chinese population have not converted or intermarried. These people seem to stand apart from the rest of the population of the island, who can be considered to be, before any ethnic or

religious denominator, primarily Seychellois. The islands became independent in 1976, and since then have relied mostly on tourism.

The Maldives, much further north and east, have a very different history. They make up an archipelago consisting of some 1,200 islands, of which less than 200 are permanently inhabited. They have been inhabited since perhaps 500 BCE, and have never really been colonised. Ibn Battuta, it will be remembered, had an interesting time there (see pages 97, 112). They have their own language and script. The population is again heterogeneous, with a mixture of Sri Lankan, Indian, Arabic, and bits of African and Indonesian influences and origins, yet today they are all Muslim and there is little sign of ethnic tensions. Islam is the official religion, and indeed the practice of any other faith is prohibited. The economy is booming, based on tourism.37 And finally we can briefly list the Chagos Archipelago, and especially Diego Garcia, about which we will say more when we consider strategy in the ocean (see pages 281–5), and Christmas Island. The latter was uninhabited until the late nineteenth century, and then was a feifdom of the Clunies-Ross family, who imported Malay labour to exploit the island's phosphate deposits. Since 1948 the island has been administered by Australia, and recently it has played a prominent role in Australia's sorry attempts to stop asylum seekers getting from Indonesia to Australia.

We wrote extensively about the impact of technological changes on the ocean in the nineteenth century, stressing the role of steam ships. Since World War II new technology has continued to have a major significance, especially in the rise and fall of ports in the ocean, and in the sizes of the ships which ply it. We will look at changes in shipping and its ownership first.

There were dramatic changes in shipping after World War II. The old tramp steamers were often replaced by container ships and bulk ore and oil tankers. With the rise of flags of convenience from places like Panama and Liberia shipping became less tied to the flags of the traditional maritime powers. Between 1977 and 1987 the registered tonnage of ships belonging to European Union countries fell from 30 per cent to 17 per cent of the world total. Once Britain had 22 per cent of the world's tonnage, now it has only 2 per cent, while the United States went from 33 per cent to 5 per cent.

If one classifies ships according to the flags they fly, the first three countries are Liberia, Panama and Japan. Broadly speaking, in the first world passenger traffic ended in the 1960s, to be replaced by air travel. As regards the Atlantic, in 1957 passenger traffic was evenly split between air and sea, but by 1967 the sea had only 7.5 per cent, and by 1973 only 1 per cent. 9

Container ships first came on line for traffic between the USA and the Gulf of Mexico in the 1950s, and spread to the North Atlantic in the early 1960s. By 1984 around 75 per cent of liner trade linking developed countries was containerised, and by the early 1990s almost all liner trade worldwide was. Their sizes are given in 'TEU', that is Twenty Foot Equivalent Unit, as the standard container is $20 \times 8 \times 8$ feet, though some are now $40 \times 8 \times 8$ feet. The container ships are getting bigger and bigger: the first generation, 1964–67, were 1,000 TEU, now new ones are 6,000 TEU and more. In other terms, the largest container ships now carry the equivalent of 72,000 dwt.40

There are obvious advantages in terms of efficiency. Centuries ago on many coasts, such as Coromandel, ships stood off and their cargoes and passengers were landed in smaller boats. Then better ports were developed, so that even large ships could tie up at berths. However, cargo handling remained extremely labour intensive. The cargo arrived at the port in a variety of packages: boxes, drums and so on. These were all lifted on board and manually stowed. Now all cargo arrives in containers and is hoisted aboard by one man using a giant crane. This is the 'ro-ro' method: roll on/roll off. Consequently these ships spend very little time in port. They can go right around the world, loading and discharging cargo, in seventy days.

The implications of this revolution are profound. Ports around the Indian Ocean rose and fell according to how quickly they provided the facilities needed for container traffic. Colombo was very fast off the mark, and became the hub for all of South Asia in the 1980s. Over the last decade or so Mumbai has built a whole new container port, and Colombo has suffered from this competition. In East Africa Mombasa assumed the same role, handling 1,300 containers in 1975, and no less than 80,100 in 1983. Some totally new ports have appeared. One example is Marmagao, developed to export unprocessed iron ore. In the 1950s it was not a major port at all, but

in the 1960s it was ranked third in India in terms of volume of traffic, and second in the 1970s and 1980s, behind only Mumbai. 41 In southern Arabia proximity to oil has dictated success. Aden was reduced to very minor significance, and Dubai/Jebel Ali, closer to the oil money, took off.

Southeast Asia provides an excellent case study of the implications of this revolution. Before containers Singapore was far and away the greatest port in the region. The colonial capitals, such as Jakarta, played a regional role. They had connections with the metropole, and were also centres for a dense local traffic handled by smaller steam ships, some owned by Dutch interests and some by migrant Chinese. Traditional craft retained a minor role feeding in to the larger circuits. The situation overall was not positive. Bangkok, for example, was located 30 km up-river, and the bar at the mouth downstream from the city meant only ships with a maximum draft of 16 feet could enter. Dredging in the 1960s increased this to 28 feet, still nowhere near deep enough for the new generation of monster ships. Bangkok was an inefficient port: in 1965 they unloaded 400 tonnes in every 24 hours, while a more competitive rate was about 750 tonnes in eight hours.

The arrival of containers produced major changes, essentially imposed from Europe and the United States, for southeast Asian ports which could not provide the facilities the rich world insisted on were simply bypassed and left to wither. The need was not only for new docks, but more generally intermodal ports which linked road, rail, and ship in one operation. Singapore moved very quickly, and by the 1970s was 'on line'. By 1983 over one-half of Singapore's liner cargo was containerised. Today it is the biggest container port in the world. Other southeast Asian ports followed, and the number of containers loaded and unloaded in ASEAN ports rose from 200,000 TEU in 1972 to 1.1 million in 1978, and 2.5 million in 1983. Singapore acts as a regional hub, along with Colombo, Mumbai, and Hong Kong; about 70 per cent of containers landed in Singapore are transshipped. Increasing size means that all these ports have to constantly expand, running fast to stand still just as was the case in the race between engineers a century ago (see pages 211–12). The big container ships today, 6,000 TEU or more, are called post-Panamax, meaning they are too big to go through the Panama Canal, which can only take up to about 3,800 TEU;

but economies of scale mean that they are still viable, even though they have to go around Cape Horn.42

The end result is that the 'traditional' Indian Ocean port city, which we have described at different historical times, has begun to disappear. In particular, there are now very few remnants of what used to be the norm, that is port cities which are primarily ports. Today there are places where ships call to be sure – Mumbai, Kolkata, Basra, Kuwait, Mombasa, Bangkok and so on – but these are no longer dominated by their port function: they are really cities, part of whose function is to have a port attached. The port is no longer the *raison d'être*.

The other major, and analogous, change was the arrival of specialised ships which are purpose built to carry only one cargo. First were oil tankers, which in the 1930s carried oil from Abadan. These are real monsters. The biggest today is apparently the Jahre Viking, which is 458 metres long, weighs 565,000 dwt, has a beam of 68 metres, and a draught of 24 metres. So vast is the deck space that the crew get around on motorbikes. Other purpose-built single-cargo monsters carry dry cargo, such as iron ore, bauxite, coal and phosphate. Another variant are the unsightly car carriers operating from Japan and South Korea to all parts of the globe, which essentially are floating car park buildings. My local newspaper recently described one entering Sydney harbour. 'She's pig ugly – a charmless, grey, round-fronted flat-backed 50,000 tonne brick with off-white funnels slapped drunkenly around the deck.' But they are efficient. This one carried 3,300 Japanese cars to five ports around the Australian coast. The roundtrip was to take only 35 days. The master and engineer were Japanese, the crew Indian and Filipino, the registration Panamanian. 43

These mono-cargo ships need new jetties specialising in the rapid loading of one specific commodity. Examples are Kharg Island for oil, Paradeep, Dampier and Marmagao for iron ore, or Aqaba for rock phosphate. These loading places are very different from traditional ports. Dampier, in northern Western Australia, will stand as a case study of this new phenomenon. In 1966 Hamersley Iron, a subsidiary of Rio Tinto, began to develop iron ore mines in sites 300 km inland from the coast. Six are operating today, with a seventh due to come on stream soon. The statistics

are impressive. Ore is carried to the wharves at Dampier in trains 2.5 km long, consisting of 226 wagons, each of which carries 105 tonnes of ore. Nine trains a day make the journey. At the port, in Dampier Sound, two wharves are used, one 295 metres long, the other 325 metres, which respectively can handle ships of 180,000 dwt and 250,000 dwt. Two wagons, carrying 210 tonnes of ore, are emptied on the manual wharf, the smaller one, in 130 seconds. On the automated bigger wharf it takes only 90 seconds. Up to 500 ships call at Dampier each year, the largest being dependent on tides, as the departure channel is only 15.5 metres deep. Every year no less than 55 million tonnes of ore are exported to destinations all around the world.

All this is impressive enough. However, what is most interesting is that Dampier, like the oil terminals in the Gulf, is hardly a port at all, at least not in the way we have described Indian Ocean ports in earlier periods. The process of loading is very highly mechanised, especially on the newer, longer, wharf. A minimum number of skilled workers drive the machines. None of them normally board the bulk carriers. All this contrasts strongly with earlier times, when stevedores linked wharf and ship. Similarly, ports used to be distinguished from inland towns by their cosmopolitan nature and heterogeneous population. This no longer applies. These huge ships are fully loaded in 24 to 30 hours, and their maximum turn-around time is 36 hours. Few of the crew have time to land. The crews are almost entirely non-Australian, so that visa requirements also hinder going ashore. There is a complete dichotomy between the crews and the wharf workers: the former never go ashore, the latter are only very remotely connected with the sea in any way at all. Even the bulk carriers in a way seem to deny the sea. They are ugly, but efficient, monsters whose sailing is in no way constrained by deep structure matters: the sea has been defeated.44

The social changes which have resulted are also dramatic. Most obviously, the workforce on the docks has declined very rapidly. This has meant the end, at least in the first world countries around the ocean, of a wharf workforce which traditionally was among the most militant of trade unionists. They have been replaced by a handful of skilled workers, highly paid and often not unionised at all. In third world ports a mass of 'coolie' labour has also been dispensed with. So also on board ship, where the

transition has been to the employment of largely unskilled, and very low paid, third world crews.

Westerners cruising for pleasure have a very different maritime experience, if indeed they have one at all. Today some cruise in small yachts, others travel on vast cruise ships. One gets little ozone in their accounts. They do not describe a liminal experience. One author wrote acerbicly that cruising yachts come into the harbour under power, not sail. 'For them the harbor is motel only, a stop along a longer passage, a stop promising a yacht-club mooring, a yacht-club hot shower, a yacht-club dinner.'45 An account by an Australian woman of her travels with her husband in 1992, on a voyage Singapore–Galle–Oman–Aden–Red Sea–Suez Canal, reinforces this. Between Galle and Oman,

The days seem short and the nights tediously long. I take the first watch until midnight, and my second from 4 a.m. to around 7 a.m. After that I can sleep for as long as I like but to my annoyance I invariably wake around nine. By the time I do the usual morning things — breakfast, wash up, clean and tidy the boat — the morning has gone. After lunch we read, listen to music, and enjoy being together. Alan [her husband] keeps radio skeds with other yachts every six hours and these are often fun if there is a 'Recipe Swap' or a 'Trivial Pursuit' or some other light-hearted attempt to brighten the day. Their greatest value, though, is in the passing on of information about conditions ahead: sea state, wind strength, weather, traps and nets, other shipping, floating objects, schools of fish.

On fine days she washed her hair, shaved her legs and baked bread.46 So also on the vast cruise liners, where it is the bars, restaurants, gambling facilities and duty-free shopping which seem to be the main attraction. Modern stabilisation devices mean that there is hardly any sense of being at sea at all.

At least this cannot be said of the round-the-world racers. Some see these as mere indulgent showing off by people with more money than sense, especially as when one gets into trouble it appears to be requisite that the nearest land state provide all possible assistance, regardless of cost, and with no thanks given. Others see them as merely opportunities for sponsors to hawk their brand names. Yet at least this is extremely maritime. Racing along in the roaring 40s and furious 50s at the bottom of the Indian Ocean, speeds of 22 knots (25 mph) and even 30 knots can be achieved, albeit

hazardously and with great discomfort. One Whitbread competitor, nearing Fremantle, wrote that 'Everything's broken, everybody's hurt, we stink, the boat stinks, we haven't been out of our foul-weather gear for 16 days.' 'It's scary to have a 30-foot wave chasing you.'47

Other modern seafarers are rich first world people who anachronistically make replicas of 'traditional' craft and sail them. Examples are many: the various replicas of the ships of the European early voyagers: Columbus, Captain Cook, the VOC ships the *Batavia* and the *Duyfken*. Thor Heyerdahl did this, and we have quoted his account of his reed boat earlier. In 1979 Tim Severin began to build a dhow using authentic materials. It was 97 feet, with cotton sails, and held together with coir, though it is revealing that he had to import craftsmen from the remote Laccadive Islands to help, as no one in the Gulf, where the boat was made, had experience in making sewn boats. His long account, in both a video and a book is at least an attempt to find out for today what dhow sailing from the Gulf to Guangzhou was like 1,200 years ago. Other dhows are still being built for oil rich Gulf potentates, this time for racing.48

More seriously, the Indian Ocean today is very much part of a worldwide economy. The preferred term is globalisation, which briefly means the compression of space and time. The implications for life around and on the ocean are major. As one concrete example, the World Bank interferes, or gives advice, quite routinely, and this has to be followed on pain of no more loans. In 1995 the Prime Minister of Madagascar dismissed the Governor of the island's Reserve Bank. True he had been reckless, but his end was mandated by the World Bank and International Monetary Fund as the price of their continued assistance. In the same year the IMF forebodingly made it clear that it was 'disappointed' with how the Comoros economy was going. Five years earlier they had insisted that the numbers in the Civil Service of the islands be reduced. Certainly the numbers were bloated, but the service had been the main white collar employer on the islands.49 In similar fashion, we pointed out earlier that Mauritius for a time was given privileged access to the European Union, but when their textiles became too competitive quotas were imposed.

Case studies of the fishing and pearling industries, and of tourism, will show clearly the benefits and losses from globalisation for people around the shores of the ocean. We can distinguish three broad periods in the modern history of Indian Ocean fishing: the colonial period, when traditional fishers were undermined by western intrusion; the period after independence, when newly independent states tried to promote indigenous enterprise; and then the last twenty years or so, when an increasingly integrated world economy has impacted in deleterious fashion on these nascent industries.

The colonial state had an effect on India's fishing communities quite early on. The Kolis were the traditional fisherfolk of Mumbai. Once the British took over the port they were subject to taxation. The British appointed a headman for the community, who was not a member but was one of the Parsi community, famous as intermediaries between the colonial power and local people. His job was to collect taxation on behalf of the British government. In the 1830s however the British sacked the Parsi collector and established direct tax collection. This is to be seen as one of many examples where the colonial state began to impact directly on its native subjects. 50

Independent India made great efforts to turn fishing into a major generator of food for the domestic market, and foreign currency earner from exports. The fish catch rose from a little over 500,000 tons in 1955–56 to 1.7 million tons in 1988–89. The value of the total catch was estimated at Rs 30 million in 1941, and Rs 3,473 million in 1981–82. Yet these gains, which were mirrored to an extent in other littoral states, did not mean that the ocean was a major producer in global terms. This is not solely a result of outdated techniques; warm oceans in general produce fewer fish than cold ones, as the warmth keeps phytoplankton production low. The most productive part of the Indian Ocean is in the extreme south, and this is far from the major states of the ocean. The ocean has 20 per cent of the world's ocean area, and 30 per cent of its population, but produced less than 4 per cent of the total world fish catch in 1960. By 1975 of the total world catch the Pacific produced about 52 per cent, the Atlantic and Arctic oceans about 41 per cent, the Mediterranean 3 per cent and the Indian Ocean about 5 per cent. However, by 1998 the Indian Ocean catch had risen from 3 million tons to 6 million tons. 51 How was this achieved, and what were the benefits and costs? We will concentrate on India.

In the decades after independence Indian fishing went through the painful process of a transition from using artisanal techniques to developing industrial fishing practices. Traditional fishing was caste based, used manual power, and produced small catches. In Kerala, for example, most fishing was done by traditional communal fishing groups in small canoes. On the other, Coromandel, coast even in the 1970s fishers used catamarans, and masula boats, the latter being sewn-plank craft with no floor or frame ribbing, and using no sail. The catamarans were merely several logs lashed together, yet they ventured out up to 15 miles to fish. As we have pointed out previously, the high surf on this coast was a constant menace when these boats came back to shore. A detailed study of one village in Tamilnadu in the mid 1970s found all the inhabitants were dependent on fishing, and all were from one low caste. The main boats they used were simple log rafts which came from Kerala. Each night the logs were separated and dried, and next day tied together again. These people also engaged in beachseining, when a boat took a large net out and then it was dragged in from the shore, hopefully with a catch inside. This method is clearly very 'low tech', and the returns erratic and unpredictable. The nets, which were large and expensive, could not be used when they were wet, so the fishers needed nine of them for each day's fishing.52

The overall changes which occurred in Indian fishing were analogous to the Green Revolution in third world agriculture. In the 1970s India's potential catch was 4.5 million tons a year, and only 1.5 million was actually being achieved. Part of the problem was low domestic demand; the average Indian ate 3 kg a year, the average Japanese 40 kg. The government, often in alliance with western aid donors, promoted the use of trawlers, hoping to increase exports. But increased exports have led to decreased availability, and higher prices, in India. Most of the trawlers are foreign made and owned, most of the profits leave India, even the labour on the deep sea trawlers is not Indian. On locally owned craft owners sometimes prefer using crew from groups with no background in fishing, they being cheaper and more malleable than traditional fishers. Theorists who write about third world 'dependency' would find all this very familiar.

In Kerala major changes began in the 1950s, helped by foreign assistance. This increased in the early 1960s as there developed a huge rise in demand for frozen fish in Japan and the USA. Exports to these markets went from 500 tons at the end of the 1950s to 1,500 tons just three years later. The brokers made huge profits. The landed price for fish caught by artisanal fishers was about Rs 150 a tonne, but the export value could be even Rs 4,000.54 The key change was the move to using European-type boats with inboard motors; this change was promoted by a joint Norwegian–Indian project. Other changes included the use of nylon nets, as opposed to coir or cotton ones, and freezing so that fish and prawns could be exported to America and Japan. Local fishers had to compete with foreign trawlers, which vacuumed up marine life in a totally random way. Especially hard hit were demersal (bottom dwelling) fish species. Once a given fishing ground was no longer productive the trawlers could move on: the traditional fisherfolk could not.

This Kerala case study typifies the dramatic and painful transition. 'The greatest asset of the fishermen of Kerala is their accumulated knowledge about fish, fish habits, waves, currents and stars which they have, through generations of learning by doing, handed down from generation to generation.' Now this was all cast aside. Motors neutralised their skill in rowing and sailing, fish finding equipment made redundant their folk wisdom which told them where to find fish. Wages in the new sector of the industry rose much higher than did those in the artisanal area. 55

The decline of the traditional sector was advanced by a shift in demand in the early 1960s. From this time prawns, in America shrimps, have been a major export for India and some southeast Asian countries. The results were mixed and changed over time. Prawns are caught by large deep-sea trawlers, but by the mid 1970s these were, in Kerala, fishing too close in shore, to the detriment of the artisanal sector. Subsequently this sector began to compete by using motors also, and nylon nets. Now the problem became overfishing and declining stocks. On land the women of the male fishers, who traditionally handled cleaning and marketing, were slowly replaced by people not from fisher communities, but rather new capitalists who treated fishing as what it in fact was becoming: an industry. In a related

area, local women used to smoke and salt fish to preserve it. They lost this role when cold storage came in.

Nevertheless, a very recent survey shows that at least in terms of numbers of boats, the traditional sector is still surviving, even if it is not prospering. In all of Kerala there are 4,000 mechanised boats, that is trawlers, 11,000 motorised artisanal boats, and a surprising 28,000 traditional artisanal craft still without motors, these ranging from single logs which provide a precarious perch for some intrepid inshore fisher, to more sophisticated lateen rigged craft.56

These changes have obviously undermined many traditional fishers, or at least made them marginal. Yet they usually lacked the political clout to get local politicians to help, as most fishers all along the Indian coast, and indeed around the ocean, come from low status groups in society. However, the most important fishing group in Kerala, while certainly low status, was also Catholic, and they received support in their protests from radical priests and even members of the church hierarchy. Further north in Goa a leader of agitation against the displacement of traditional fishers in the mid 1970s was harassed by police in the pay of industrial fishing interests, and was given sanctuary in a Jesuit house in Panaji. Sad to say that these efforts were more or less in vain: the process of modernisation and mechanisation was irreversible.

The situation in Gujarat developed in a rather different way. As elsewhere, the number of mechanised boats shot up from 314 mechanised and 3,217 not in 1961, to 15,698 of the former and 8,918 of the latter in 1998. In the same period the number of trawlers rose from none to 6,390. Unlike in most of the rest of India, in Gujarat the artisanal and industrial groups have been able to coexist relatively peacefully, in part because most of the owners of the new industrial trawlers come themselves from traditional fishing communities. Yet there are also less positive changes. The trawler crews are paid in wages now, not with a share of the catch. Much of the gear is now imported — petrol, nylon twine, fibreglass — displacing locally made alternatives. Depletion of fish stocks is a major concern. The huge foreignowned factory trawlers use smaller and smaller mesh nets, which scoop up

marine life indiscriminately, and lead long-term to devastation of fish stocks.57

All this can be seen as the painful, but arguably necessary, process of modernisation, a drive towards greater efficiency based on the use of new technology, which certainly has some winners and some losers. However, over the last two decades Indian Ocean fishers have been confronted by a situation where their fates are largely determined by forces far away and outside their control. This reflects an increased integration of the global market, a process summed up by the term globalisation. To be sure, this was not new. We have shown how one has always been able to write a history of the ocean, looking at connections and processes within its boundaries, yet there also has been, to an increasing degree, a history *in* the ocean which goes beyond its bounds (hence the title of this chapter). What has happened recently is really an intensification of this process, based on vastly faster communications, and the triumph of open economy and free market notions.

What did this mean for Indian Ocean fishing? We have noted that the Indian Ocean has been relatively underfished. Two processes turned world attention to it. First was the way in which other fishing grounds were being rapidly depleted: as one example, in the mid 1950s around 150,000 bluefish tuna were caught each year in the Atlantic, but by the early 1970s only about 1,800. So also with tuna and other species in the Pacific. In the 1990s the world fishing industry was in trouble. Only two of the world's fifteen major fishing regions have still-increasing catches: the western and eastern Indian Ocean zones, This is what has been called the tragedy of the commons. Humans deplete natural resources which no one 'owns'; the sea and fish are prime examples. In a situation of unrestricted access to resources, the result must be depletion. The world situation is deteriorating all the time. As shallow water fisheries collapse, very deep-sea trawling, going as deep as 1.5 km, increases. About 40 per cent of the world's trawling grounds are now in water deeper than the continental shelf. What makes this even more threatening is that while fish species found in shallow waters can recover quite quickly, deep water species take much longer to replenish themselves. One example is the orange roughy, which only begins to reproduce when it is twenty years old, and can live to be 150 years old.

Now it is close to extinction. Similarly, deep sea coral which took 5,000 years to grow can be destroyed by one trawler passing its net over it.58

It was not only depletion in traditional western fishing grounds which caused the swing to the Indian Ocean. The move was also helped by its cheap skilled labour. First world manufacturing tends to move to third world areas where wages are low, and working conditions often unregulated. The fishing industry, and especially prawn cultivation, is merely one example.

The prawn industry is at the cutting edge of globalisation. Once used as fertiliser in India, from the 1960s their price has increased dramatically due to freezing techniques which enable them to be exported to markets in Japan, Europe and North America. The beach price of 'pink gold' in 1961–62 was Rs. 240 per tonne, but by 1971–72 it was Rs. 1,180 per tonne.

The result was a huge increase in the value of this new industry, especially in the coastal waters of the Bay of Bengal: in the Indian state of West Bengal, in Bangladesh, and in Thailand. In 1984 total production in South Asia was worth \$US 512 million, in 1995 \$US 2.79 billion. This was achieved by the introduction of intensive industrial methods of production. Traditional fish farms produced 1,000 kg per hectare, but the new intensive 'industrial' farms 10 tonnes per hectare. In Bangladesh production was pushed by the World Bank and IMF, who insisted that the country develop export industries. There was however a marked down side to this achievement. Much of the capital came from overseas, and government laws to control the industry were often ignored. Pollution has increased, and as the process becomes more mechanised, less local labour was needed.

Critics of export-oriented aquaculture argue that it has largely negative social and environmental consequences and that marine and estuarine fishers and coastal agricultural communities whose livelihoods have traditionally been rooted in local systems of fishing and crop cultivation are being incorporated into global networks of commodity flows which increasingly dictate standard and type of product, price, and other conditions of production, marketing and sale. 59

Most revealing of the reality of a global market was an episode between July 1997 and July 1998. The European Union and the United States banned the importation of Bangladesh prawns, claiming that unhygienic production methods rendered them unfit for human consumption. The ban was lifted after quality control had been improved. 60

A similar move to intensive industrial production has occurred on parts of India's west coast also. Here and elsewhere traditional agricultural lands have been taken over for prawn farming. It used to be that in coastal areas fish and rice coexisted on the lowlying land, rather as in the Marsh Arab area of the Tigris-Euphrates delta. Sluice gates were used to regulate the supply of water for both. Fish and prawns were a by-product of rice cultivation. Now with the price of fish, especially prawns, up and rice down, the land is flooded more or less full time to enable prawn and pisciculture. To be sure export earnings have risen, yet the profits go to outside, even foreign, capitalists. Local employment in fishing has declined, and a complicated ecologically sound balance has been destroyed. Perhaps most revealing, unusually in India fish has been a large part of the traditional diet of Goan Christians, but now those species, such as pomfret, which have an export potential are priced out of the reach of local consumers.61

Of all preciosities, pearls are most purely maritime. They are completely aquatic, and entirely natural. Unlike precious stones, their shape is not affected by humans, though in recent years people have helped nature to produce pearls: nevertheless, the shape and colour are beyond human intervention. As such, a brief description is in order. The decline in the traditional pearling industry is hardly a cause for lamentation, for it was brutal and dangerous. This trade had boomed in the Gulf in the nineteenth century. Exports rose from about £100,000 a year at the beginning of the century, to £300,000 in the 1830s, £700,000 in the 1870s, and over £1 million around 1900. At this time the Gulf produced half of the pearls in the world.62 These profits were produced with a very heavy human cost. Off Bahrain all the divers were indebted to the merchants who controlled the trade, and so had no choice but to continue diving. Worse still, their debts were inherited by their sons, who as a result were also forced into the debilitating and dangerous activity. The trade declined catastrophically in the 1930s, partly as demand for this luxury product fell during the depression, partly as the Amir of Bahrain implemented reforms, but mostly thanks to competition from Japanese cultured pearls. 63 In the season for pearling, June to October, in 1939 Alan Villiers found only 150 craft venturing out from the other main centre in the Gulf, Kuwait, when forty years before there would have been at least 600. The price of 'real' pearls had fallen to one-tenth of what it had been, but he could not regret this decline, because for the divers the activity 'was accompanied by hardships almost intolerable, by risk to health and life and limb, and its rewards were scanty, often distributed most unfairly, and sometimes withheld from their rightful owners altogether.' Divers, using only a nose peg, were required to dive to a depth of 60 and 70 feet over 100 times a day, staying under for about a minute. By this time many of the former divers had been able to escape and work for the oil companies instead.64

The decline occurred also in the Gulf of Mannar, the other traditional pearling region. Developments around Broome, in Western Australia, over the last century or so are worth a brief description, as they provide a useful case study of change and adaptation. In 1861 the pinctada maxima oyster was discovered in Roebuck Bay. These are the largest oysters known, with the shells reaching a diameter of up to 12 inches. Aborigines had been diving for pearls, and the mother of pearl shells, for many years, selling them long before the white invasion to traders, often Chinese from Makassar. From the 1860s Europeans entered this trade, using coerced Aboriginal divers. Women were preferred. In Nickol Bay six or eight of them would go out in a dinghy with a white man in charge. They had no aids at all – no goggles, no stones – and went down only to a depth of about 10 metres. Mortality was very high. In the 1890s copper helmets and canvas suits began to be used, and an influx of divers from Japan and the Malay area produced a boom in the 1880s and through to World War I. Some 400 luggers were based in Roebuck Bay. In the off season 3,000 divers congregated in Broome. This was still a very dangerous trade, as witnessed by 900 Japanese graves in Broome's Japanese cemetery. Great risks were taken, and many divers died when their lugger was caught in a cyclone. In 1936 twenty luggers and 142 men were lost in a huge cyclone. Even more dangerous was the bends, or decompression sickness. The solution, to come up slowly from the depths, was worked out only in 1905, and even after this it took time to educate the mostly illiterate divers: in 1914 alone thirty-three divers operating out of Broome died from the bends. Pearls were found in few of the oyster shells. The valuable product was mother of pearl. Around 1900 Broome produced 80 per cent of the world's supply of this preciosity. The trade declined in the 1920s and 1930s, and was dealt a fatal blow by the development in the 1950s of plastic for buttons, cutlery handles, walking stick grips and a host of other items where mother of pearl had previously been used.

However, today Broome is again the centre of the pearl industry, this time focusing on cultured pearls. This all began in the 1960s, and is now a multimillion dollar export earner. The luggers, now very modern fibreglass airconditioned craft, again go out to Eighty Mile Beach, south of Broome. Mother of pearl has regained some market share, so the larger oysters are taken for their shells. Smaller oysters are collected and taken in special ships, where they are in fresh sea water all the time, north to King Sound. Many die of stress on the way. Natural pearls are a result of the oyster building up encrustations, called nacre, around a foreign body such as a grain of sand, or a small parasite. This occurs on the outer mantle inside the shell. Cultured pearls are produced rather differently. Once the oysters have reached the oyster farming area, there comes the technical task of inserting a tiny nucleus into the oyster's gonads. Fragments taken from Mississippi mussel or clam shells have been found to work best. Once the nucleus has been inserted, the oysters are placed in metal frames, and left in suitable locations around King Sound. Over two years the oyster covers the nucleus with nacre, forming layers like an onion. The pearl is then extracted. As the oyster is now bigger, a larger nucleus can be inserted, and a larger pearl produced. This process can be done, on rare occasions, four times using the same oyster. Parts of this technique were learnt from Japanese pearl farmers. However, the *pinctada maxima* is much bigger than any others available elsewhere. Japanese cultured pearls reach a maximum diameter of 11 mm, while Australian ones can be monsters of 18 or even 21 mm. Since the 1970s about 70 per cent of the world's cultured pearls have come from Broome.

Cultured pearls provide a fine example of change and commercialisation. Natural pearls have always been valued by elites, in for example imperial Rome, and the Muslim and Hindu worlds. Many portraits of past potentates show them with necklaces of huge pearls. They were produced in the

hazardous and chancy manner that we described earlier. Indeed, some purists, especially in the Arab world, despise cultured pearls and still consider only natural ones are worthy of being bought. Today it is a highly scientific branch of aquaculture, or marine farming. The animals, the oysters, are cosseted to avoid their being stressed. Increasingly they are bred in captivity, rather than being harvested from the wild. Every few weeks the metal frames in which they are trapped are brought to the surface, and their shells scrubbed clean of encrustations. Once the nucleus has been implanted, the panels containing the oysters have to be turned over every two days for forty days. Oysters are valuable livestock, like cattle or sheep. The divers who do most of the work are really farmers, tending their livestock. Indeed, in recent years pirates have taken to raiding the oyster farms and stealing the shells, the exact equivalent then of cattle rustling.65

The tourism industry around the Indian Ocean today betrays many of the benefits and costs which we have just found to characterise fishing. Again globalisation has had mixed results. Certainly tourism has expanded in geometric fashion in the last few decades. Total numbers worldwide have roughly doubled each decade: from 25 million in 1950 to 69 million in 1960, to 160 million in 1970, to 284 million in 1980, and to 425 million in 1990.

Of course travelling is not new, but it may be that we can differentiate between travellers in past times, people we have quoted extensively like Ibn Battuta and Isabel Burton, and the modern tourist. Before steam, sea travel, even for the elite, was a long and hazardous undertaking. In the nineteenth century travel, both for work and pleasure, increased dramatically, yet the former far outweighed the latter. The Brasseys and their entourage were very exceptional (see pages 233–4). Most of the passengers on a P&O liner were not recreational travellers. If they were men they were almost all going somewhere to take up a job. Women accompanied their husbands, or travelled to seek a husband – the ill-named Fishing Fleet of marriageable young women who came out to India for a season hoping, so we are told, to catch a husband. Even more demeaningly, those who returned home unbetrothed were Returned Empties.

Mass tourism then is a phenomenon of the second half of the twentieth century. The advent of larger aeroplanes in the 1960s facilitated its growth, as did generally prosperous economic times in the first world, which enabled lower class people to afford holidays overseas. There are differences, obviously, between different types of visitors, ranging from the fully catered and accompanied luxury tourists, who stay in hermetically sealed hotels in the third world, to the younger solitary travellers with their trusty *Lonely Planet* and *Rough Guide* books. There is even a certain snobbishness about who is a tourist, and who an implicitly more adventurous and 'authentic' traveller. As the saying goes, 'I am a traveller, you are a tourist, they are a coach party.' Or as Evelyn Waugh put it succinctly: 'The tourist is the other fellow.'

When western tourists stay in coastal areas around the Indian Ocean their relationship to the sea is very different from the fisherfolk with whom they mingle. For the traditional beach dwellers the sea is a source of a precarious living, often a dangerous or hostile place, not necessarily benign. Tellingly, their houses often face *away* from the beach. For leisured middle class westerners the sea and the coast is a space away from normal life. The impressive Australian novelist Tim Winton put this well. 'I often wonder about these two childhoods of mine, the one contained and clothed, between fences, the other rambling, windblown, half-naked between the flags.' Or again:

Freediving in the open ocean, for all the other things it is, is mostly a form of forgetting. Surfing, swimming laps, drifting a bait from a jetty or a boat are similarly forgetful things. They are forms of desertion, retreat, hermitage, a stepping-aside from terrestrial problems to be absorbed into the long moment. The sea is immense, trackless, potent, but above all, neutral. 66

All this is new in world history: Lencek wrote of

the transformation of the beach from an alien, inaccessible, and hostile wilderness devoted to conquest, commerce, exploration, and the primal customs of tribal cultures, into a thriving, civilized, pleasure and recreation oriented outpost of Western life style, where so many sybaritic impulses of culture have been indelibly concentrated. 67

With this background in western perceptions of the coast, some case studies will show the varied impact of tourism on coastal areas. I will start with

Goa, the former Portuguese colony on the Indian west coast, a place I have visited frequently over the last thirty-four years. Numbers have shot up recently. In the 1985–86 season, roughly October to May, twenty-four charter flights brought 3,568 passengers, in 1995–96 there were 337 flights bringing 75,694 passengers. In 1985 the total number of tourists was 775,212, of whom 682,545 were Indian and 92,667 foreign. Ten years later the numbers had risen to a total of 1,107,705, of whom 878,487 were Indian, 229,218 foreign. Of the foreign arrivals, 58.6 per cent were from the UK. The most up-to-date data available puts the population of the area at 1,400,000, of whom 400,000 are dependent on the tourist industry. Foreign tourists number 300,000 a year, and domestic 960,000 a year, so the number of tourist who visit each year is just below the total local population.68

Goa offers the tropical paradise stereotype: palm trees, sunsets over the Arabian Sea, white sand, cheap accommodation, readily available alcohol, English-speaking locals, and some reassuringly western elements such as a coastal population which is largely Christian, and huge churches in the deserted city of Old Goa. Three broad tourist phases can be distinguished. In the 1960s Goa was a haven for so-called hippies, who lived rough on the beaches or in beach shacks, and outraged the local population with their inappropriate dress, or total lack thereof, and massive drug consumption. Soon after a new strand appeared, of middle class Indians attracted by the availability of alcohol, and by the presence of the hippies. Brochures for bus sightseeing tours promised old churches, and beaches where 'naked hippies will be seen'. More recently the Goa government has discouraged budget travellers, and instead promoted short-stay mass market tourism, along with very up-market tourism in a handful of luxury beach resorts. The latter is increasingly being favoured by the government. Europeans fly in direct to Goa, have two weeks in a hotel, get sunburnt on the beach, and fly out again. This is hardly an exotic experience; better to describe it as enclave tourism, where the only locals met are waiters, servants, and taxi drivers.

A beach scene frequently found in Goa, and in other beach resorts on the west coast such as Kovalam, is typical. Portly western men in G-strings self-consciously help traditional fishermen haul in their nets, which may contain enough for one meal. Their bikini-clad women enthusiastically take

video pictures of this picturesque scene. Two telling changes, from Kerala, seem also to sum up what is happening. The traditional rice boats which for centuries have transported rice in the backwaters inland from the coast, are now being converted into luxury house boats for western tourists and Indian yuppies. Similarly, the monsoon in Kerala has always been a dramatic sight, redolent with meaning for the local people, for indeed their livelihood often depends on its arrival. Today 'monsoon cures' have become popular with middle class Indians, who travel from all over India to take part in what is essentially a 5,000 year old ayurvedic tradition.

The larger hotels in Goa are often owned by groups based elsewhere in India, or even by foreign capital. Lufthansa, Club Mediteranee and Hyatt are all involved. Smaller hotels may be built by Goans who have made money in the Gulf and invest in this new industry. This is a very fragile and vulnerable market indeed. Any minor perceived threat means bookings dry up. The terrorist attack on the United States in September 2001 and subsequent military campaign in Afghanistan affected tourism worldwide. Bookings on charter flights, usually 130 or 140 a day, fell to only 10 or 12. Hotels remained nearly empty, and packages at absurd rates were advertised, such as return flights from England to Goa and bed and breakfast for seven to ten days for as low as £79. This was obviously exceptional, yet in previous seasons an over-supply of accommodation had produced similarly uneconomic results.

The effects on the ecology of the area have been dire. There are now at least fifty swimming pools in the tiny Calangute—Baga strip alone, when thirty years ago there were none. The government privileges hotels over local rice farmers when it allocates water, so that the swimming pools will be full, and the lawns green. The three Taj hotels at Fort Aguada take more water than that available to the population of all the local villages of Calangute. Golf tourism is a new trend, and whole villages are being relocated to make room for a planned six new courses, most of them foreign controlled. 'Development' has often been uncontrolled, leading to massive violations of the environment, such as building far too close to the maximum high tide level, discharge of sewage into the ocean, and mounds of discarded plastic containers disfiguring the sand. One of Goa's main attractions, pristine

beaches, is being violated and ruined; it is in danger of becoming less idyllic, and falling out of favour.

For the local people all this has been a very mixed blessing. A recent acerbic analysis claimed that tourist development in Goa 'in the process of creating global tourist sites, determines that (local) people's cultural and ecological space is dispensable to its requirements.' Tourism 'is predicated upon a development ideology that defines local people's space as dispensable to the needs of national and transnational capital.' The same author comments on what is called 'staged authenticity', that is the 'typical' Goan fisherman, villager, toddy tapper, who performs in hotels. 'Goa has been constructed to serve as one of the world's pleasure peripheries, a cultural space for the leisure consumption of tourists divorced from the needs and concerns of everyday life.'70

Much the same can be seen on the Swahili coast. However, the setting is rather different. The main historic population centres were the Swahili port cities that we have written about previously. In particular, the Stone Towns of Lamu and Zanzibar, even though they mostly date only from the nineteenth century and later, are considered to be heritage attractions, and distinctive enough to be preserved. Yet as tourist attractions some changes had to be made. Many of the old houses have been reconfigured to make hotels, and some unsympathetic 'development' has taken place both within the stone towns and on their edges. Lamu is, as we have already pointed out, an Islamic town which acts as a focus for Muslims all up and down the coast. Many of its women wear very all-enveloping robes. Ten years ago the only place a tourist could buy alcohol was in a rather dingy cellar attached to the hotel in the centre of the town. Now the bar has moved out onto the main street, which runs along the waterfront and is the centre of Lamu life. It even boasts a small collection of bar girls. Westerners complain that the exotic is being destroyed, but the real question is whether 'tradition' should be preserved for the benefit of foreigners. Most Swahili probably would prefer not to be living in a museum, but rather have up-to-date plumbing.

We found in the case of Goa that much of the profit from tourism does not stay in Goa. Similarly in the Swahili town of Malindi, now really an Italian resort, with a line of Italian owned hotels controlling the beach front. More generally, it has been estimated that 45 per cent of funds generated by tourism remain in the third world country concerned. Of the money spent on a beach holiday in Kenya, 70 per cent goes back to the first world; in Thailand it is 60 per cent. There is also, again as in Goa, internal colonisation in that investment in tourist spots often comes from an elite from the interior. This applies to much of the Kenyan coast.

Coasts are one thing, but islands are another: the ultimate in the tropical fantasy for westerners. This perception fits nicely with the fact that most Indian Ocean islands have fragile economies. Helped by pressure from the World Bank, many of them have found western tourists to be their best source of foreign currency earnings. This has now been recognised by people promoting islands to jaded travellers, witness a web-site come-on:

Somewhere in the Indian Ocean, far from African coast, a bunch of islands offers to its visitors a range of tastes, smells and visions at the crossroad of Asia and Africa. Whatever you are looking for – white sandy beaches, rocky mountains, luxuriant forests or plain deserts – you'll be fully satisfied. If your fascination relates to snorkelling in coral reefs, trekking, or birdwatching in a unique nature, you will enjoy what you'll discover there. Away from commercial ways, those countries: Madagascar, Seychelles, Mauritius and Reunion Island, thanks to their isolation, preserved among their inhabitants an incomparable kindness.

Of these, the two most developed for tourists are Mauritius and Reunion. Madagascar still seems only for the very adventurous, or those interested in 'ecotourism', where more is expected than just white sand beaches and fawning 'natives'.

Mauritius benefits from the fact that French is still widely spoken, even though France lost the island two hundred years ago. Nearly half the arrivals are from France. A total of 422,000 arrived in 1995, and 487,000 the next year, and they spent close to \$US1,000 each. Mauritius has opted to aim at the top end of the market, unlike say Malindi or Goa. There are no charter flights, though this situation may change as competition increases. At the Royal Palm Hotel 'a team of ladies attired in brilliantly-coloured saris scrub the coconuts on the trees to a shine, rake the sand, vacuum palm leaves from the bottom of the pool and snip the grass into patterns with tiny shears.' Tourism and how to interact with foreigners is an important part of

the curriculum in local schools. There are positive and negative elements to the boom. On the one hand, most of the industry, unlike elsewhere, is locally owned, but then profits are held back by the necessity to import food and other 'necessities' for the tourists. The island is only about 2,000 km², so there is pressure on the disposition of sewage, on the water supply, and on the relatively small number of good sandy beaches. 71 Reunion predictably draws nearly all its tourists from France. Its lack of good beaches is compensated by its many good hotels, popular places for conferences and meetings. The Seychelles have little else but tourism in the way of assets, especially once the end of the Cold War resulted in the USA closing down a satellite tracking station in 1996, which meant the loss of the annual rent of \$US4.5 million. Again the European up-market tourist is targeted. Arrivals rose from 86,000 in 1989 to 110,000 in 1994.72 So also in the Maldives, where only about 200 of the total of 1,200 islands are inhabited. The government has tried to locate tourist facilities on those previously uninhabited, creating about fifty enclave resorts popular with western honeymooners. Visitors usually go straight from the airport to their resort, having little or no contact with local people. The local population is rigorously Muslim, so alcohol is available only on the resort islands, and is served by foreigners imported so that no Maldivian has to handle this forbidden product.

It is easy for elites to sneer at mass tourism, and to stress the negatives, some of which have just been outlined. Some would see first world tourism to the third world as analogous to sweat shops in Thailand making expensive shoes and clothing for a rich overseas clientele. Certainly there is a danger that what attracts westerners to the coasts of the ocean will soon be lost. Beaches are increasingly polluted, palm trees are cut down to make way for new hotels, the coral reefs are disappearing thanks to uncontrolled access to them, polluted waters, and souveniring of bits of them. The comments of the authors of a previous book in this series on the Sea in History are apposite and generally applicable: 'it behoves thinking, as people flock to the shores in ever-increasing numbers, how fragile is the line between our need for recreation, peace or spiritual sustenance from the sea, and the effects of our recreation on the sea itself.'73

Tourism is an obvious part of globalisation, but there are other implications of these increasing connections. We pointed out that Aden was for a time left behind while ports in the Gulf, nearer to oil, flourished. More recently the dominance of Dubai has been challenged by Salalah in Oman, and Aden in Yemen. Maersk and Sea-Land, two big shipping companies, have bought stakes in Salalah, and the Port of Singapore Authority is running Aden. Dubai has an agreement to manage Beirut port.74 The links spread far and wide. So also with people. Thanks to cheap air travel, Nigerians now work in Jiddah and Mecca, and Koreans and Thais in the Gulf. Somalis working in the Arab world are numerous, and in the 1980s the remittances they sent home were thirteen times the Somalia-based wage bill. The sea is also now becoming territorialised. We noted earlier that much of the ocean is the commons, open to exploitation by all, and this is still the case overall. Yet littoral states now claim as their actual territory a zone of 12 nautical miles from the shore, and their Exclusive Economic Zones extend to 200 miles from shore. More and more of the ocean is 'owned' by some state or other. This is facilitated by the way modern techniques, using satellite navigation, can draw lines in the ocean to show boundaries, just as has been done on land for centuries.

Another deleterious, albeit controversial, aspect of a more integrated world is that environmental problems are often global in scale. Global warming, mostly a consequence of rich world industry releasing greenhouse gasses, is claimed to be causing a rise in the level of the ocean. Average global temperatures went up about ½° C in the twentieth century, and the sea level rose between 4 and 10 inches over the same period. Records show that 1998 was the warmest year ever since temperatures began to be recorded 150 years ago. As an Indian Ocean consequence, the Maldives, where most of the 1,200 islands are no more than a metre above sea level, are likely to be under water within thirty years. 76

Coral reefs are important tourist attractions, and form a fascinating natural underseascape. They have been under threat for at least fifty years. In the late 1960s Jacques Cousteau worried that coral reefs were in danger as the purity of the water declined. Equally threatening, conchs were being taken to sell their shells to tourists, but they are the deadly enemy of a kind of starfish which is very destructive to coral: consequently coral suffers. More

recently global warming has had a catastrophic effect on coral reefs all around the Indian Ocean. At least half of the total died in the two years up to 2000. Coral cannot tolerate a rise in sea temperatures of more than 1 or 2°C for more than a few weeks, yet in the Seychelles in 1998 the temperature was 3°C above seasonal norms for several weeks. The results have been far-reaching. It is estimated that in 1998–99 the death of the coral, or its bleaching to an unattractive monochrome, cost the Maldives' economy about \$US 36 million in 1998–99, a result of the impact on tourism and on local fishers.77

There is atmospheric pollution also. In 1999 a haze of air pollution covered some 10 million square kilometres of the Indian Ocean. It was caused by burning fossil fuels from India, China and southeast Asia blown over the ocean by the northeast monsoon. The result was acid rain and lower temperatures. In 1997 the warming of the western Indian Ocean is considered to have caused excessive rain over East Africa, and consequently a rise in the level of Africa's lakes, and severe flooding on the Nile. In many of the littoral countries indiscriminate clearing of forests has had very adverse effects. It is estimated that for ecological stability one-third of any given area needs tree cover, but in India this is down to 10 per cent. This leads to greater flooding, but also the reverse: as the forest cover diminishes, rainfall declines.78

Threats to the environment are not that new. The ecology of St Paul and Amsterdam islands was radically changed around 1800 by imported and then feral pigs, deer and rabbits, so that, as a contemporary mourned, 'Once they were green, now they are brown, desolate and despoiled.'79 The dodo was rendered extinct by European hunting and introduced animals. In the early 1950s Cousteau was at the Aldabra islands, which consist of four small atolls. He found thousands of giant land tortoises, some with shells five feet long. Herbivores, they graze on grass and seem to have no enemies. Then he went on to a neighbouring island and found heaps of tortoise skeletons. All the grass and shrubs had been eaten by feral goats, and the tortoises had starved.80 The dugong, or sea cow, is threatened by poachers with modern nylon nets. They even use dynamite sometimes. In the southern Indian Ocean both the Patagonian toothfish and whales are

threatened by illegal fishing boats. One estimate puts the value of this illegal trade in the toothfish alone at about \$US150 million.81

Other littoral areas have been detrimentally affected by various governmental policies. We wrote earlier of the Marsh Arabs and their unique culture (see page 42), but their whole way of life is now close to extinction. Over the last 25 years the size of the marshes has dwindled by no less than 90 per cent. This has been caused by drainage to provide irrigation water elsewhere, and by building massive dams up stream, not only in Iraq but also in Turkey, Iran and Syria. Saddam Hussain has favoured the end of the marshes, for they provide a refuge for Shia Muslims often opposed to his dictatorship. Much of the landscape is now salt deserts, the people are in refugee camps. The smooth coated otter, once common, is now extinct, and migrating birds are left with no havens.82

A final ecological problem is the vast traffic in oil from the Gulf to the rest of the world. Years ago Thor Heyerdahl had a bad time in the Straits of Hurmuz:

By midday we found ourselves for the first time in a terribly polluted area. Small clots and large slices of solidified black oil or asphalt floated closely packed everywhere in a manner that clearly testified to recent tanker washings. But the black tar soup was all mixed with bobbing cans, bottles and other refuse, and an incredible quantity of solid, useable wood: logs, planks, boards, cases, grids and large sheets of plywood. One such sheet carried a deadly yellow snake as passenger. All the wood was smeared and clotted with oil from the seas that tossed it about.83

Oman is particularly affected as tankers deballast as they enter the Straits of Hurmuz. After the spilt oil evaporates and is weathered it washes ashore in the form of disgusting tar balls. One half of all the world's merchant shipping passes through the Straits of Melaka, and here also oil spills are a constant possibility.84

Globalisation also implies social and cultural worldwide integration, but this is not a one-way street, and nor is globalisation exactly the same as westernisation. Here are a few aspects of influences from outside, which show that any attempt to write a history *of* the ocean covering recent years is really invalid, for so important are outside influences that we really, just like Horden and Purcell in the case of the Mediterranean, can usually only

write of history *in* the ocean, that is one that necessarily stresses extra-ocean influences. In the Gulf region internet usage is expanding rapidly. A recent survey found that 42 per cent of users had bought books from Amazon.com, while 38 per cent watched CNN news, only 8 per cent the local Gulf News.85 This changed during the second Gulf War. The creation of Israel in 1948 led many young Indian Jews to undertake aliyah. Frater was told that of the very old community in Cochin, there were only five families left, a total of thirty-one people. Of the remaining young men one was about to leave for Israel, and there had been no local weddings for seventeen years.86 Or consider that Reunion, still a French possession where the Catholic church is powerful, has one of the highest birth rates in the world: nearly 3½ per cent a year. The Jesuit network stretches globally. Young Jesuits from India are adopted by western congregations, often in Germany, and they in turn when they go back to India act as mentors for Catholic communities in East Africa.

We have written extensively about Muslim conversion and rectification networks in previous periods. These efforts continue to today, so that Islam is the fastest growing religion in Africa. Here then is another aspect of globalisation, connections which spread around and beyond the ocean. This is hardly westernisation, and nor is the spread of Indian movies. Too often writers bewail the octopus spread of Hollywood and American TV soaps. It is true that for some years the American soap *Baywatch* was the most watched series in the world, but the spread of Hindi movies in all the Indian Ocean and beyond is equally important. These movies are certainly formulaic, but the formula is different from Hollywood. 'Marsala' films are influenced by Indian classical literature, especially the great epics of the Ramayana and Mahabharata. Every film, regardless of subject matter, has dance and music in conjunction with romance, adventure, violence and morality. What is important is that this recipe appeals not only to the Indian diaspora, but to many others in Africa, the Middle East and southeast Asia. This is understandable in arguably Indianised areas like Burma and Indonesia, but they also find a huge market in Kenya, Tanzania, Sri Lanka, Singapore, the Gulf states, Thailand and Indonesia.87 Changes in Indian television have also provided a new market for Bollywood, and all the other areas of India which make movies. Up to the early 1990s the governmentcontrolled Doordarshan mostly, as a matter of policy, promoted the Hindi language. Now that private players have been allowed in, there is much more content in other Indian languages, and also more foreign content. More channels need more product from the local film industry. Here also however westernisation has not been totally triumphant. Rupert Murdoch found that he had to indigenise his offerings via satellite in India much more than he had expected to.88

So far we can write about the distribution of these movies, or for that matter of Islam or Christianity, but we know little about something even more important, that is their consumption. Certainly Hindi and other Indian movies mean different things to different audiences, in other words are consumed in different ways by different receptors, but this difficult matter has been little studied so far.

In some aspects globalisation has acted to increase worldwide communications at the expense of more local circuits. As examples, it is now quicker to get to Paris from Mayotte than it is to get to Zanzibar, despite age-old connections between these two East African islands. Similarly, it is quicker to get goods from a French mail order firm than it is to get something from Mombasa, again undermining very ancient local connections. International connections via satellite, for those who can afford them, are often quicker and more reliable than internal telephone connections in many littoral countries around the Indian Ocean.89

A further aspect of history *in* the Indian Ocean is to look at strategic matters, and the place of the ocean during the Cold War and later. We need also to consider the local reaction to this, which is halting moves towards greater integration within the region, that is then an attempt to respond by a focus *of* or within the ocean.

The context is the end of the British lake period. British naval dominance was plain to see after 1815, and indeed could be dated from the end of the Seven Years War in 1763. This lake took very little effort to remain exclusive, as no other power challenged British dominance, except for a land-based threat from Russia. Britain concentrated her navy in the Atlantic and the Pacific, not the Indian Ocean, and within the ocean spent most

money on the Indian Army. The Royal Navy's job was to combat piracy, as defined by the British, and to suppress the slave trade. It was only in the 1920s that British naval dominance worldwide began to be eroded.

As independence got closer the influential author and diplomat K.M. Panikkar wrote a short book about India and the Indian Ocean. He complained bitterly that his fellow countrymen were landlubbers, yet 'In fact it may truly be said that India never lost her independence till she lost the command of the sea in the first decade of the sixteenth century.' From this time 'the future of India has been determined not on the land frontiers, but on the oceanic expanse which washes the three sides of India.' It was crucial that newly independent India have a strong navy, in alliance with a continuing British presence, for British 'interests in the Ocean are such that it will be nothing short of national suicide for her to withdraw from that area.'90

Alas, Britain's decline as a Great Power meant a role in the distant and by now rather irrelevant Indian Ocean was beyond its capacity. In 1968 Harold Wilson announced that Britain was to withdraw from the Far East, the Arabian Sea and the Gulf by the end of 1971. They left the great naval base at Singapore in 1975, truly marking the end of an era. It is no coincidence that it was in 1971 that the Soviet Union first sent a substantial fleet into the ocean, though they had had a smaller presence for a few years previously. The ocean in fact now became a player, albeit a minor one, in the Cold War.

Writing at the beginning of the twenty-first century, it is already difficult to appreciate the intensity of feeling generated by the rivalry between the Soviet Union and the United States as it affected the Indian Ocean. Certainly at the time some academics and serving officers saw a very clear danger. Hanne, writing in the *Military Review*, subtitled the 'Professional Journal of the United States Army', was concerned that the United States had not moved in to fill the vacuum left by the British departure: 'many analysts have stated that the United States, with or without its allies, would have to move a visible naval force into that region to preclude its immediate de facto annexation by the Soviet Union into its "sphere of influence." Large areas of the Soviet Union would be within range of American submarines if they were based in the Indian Ocean, but instead, 'Attempting

to convince the newly independent powers that security, self-determination and equitable prosperity come from the acceptance of a pro-Soviet foreign policy, the USSR is moving steadily along many fronts, publicly confident in the historic veracity of its ideology.'91 So also from the defence analyst Patrick Wall in his edited book The Indian Ocean and the Threat to the West. He complained that the West 'is watching supinely while the world's greatest land power [that is, the Soviet Union] starts to dominate the sea as well.' Instead of doing something about this, 'Leftward-leaning Western Governments enthusiastically abuse, and try to boycott, South Africa and Rhodesia. At the same time, without seeing any inconsistency, they advocate an expansion of trade and close cultural links with the Soviet Union and her satellites.' It was a matter for regret that 'Few, if any, African states can really be called pro-Western. The majority are unaligned but responsive to Soviet, and Chinese, penetration.... Lenin believed that the Western democracies would destroy themselves from within through becoming soft, greedy, and lacking in will power. He may yet prove to have been right.'92 Scary stuff, but perhaps appropriately I bought my copy of this book at a stall. The stamp inside said 'Discarded'.

What happened was that the Soviet Union was concerned about what it perceived as an American build-up in the area, as seen in the total support given to the Shah of Iran from the early 1960s, and the formation of various military alliances, of which the most important for our area was CENTO. In August 1971 the Indian and Soviet governments signed a Treaty of Friendship and Cooperation, which increased Soviet access in the region. The west was concerned not only about Soviet activities, but also about the fact that as domestic oil supplies declined in the United States the Indian Ocean, and especially the Straits of Hurmuz and Melaka, were the choke points through which travelled much of the vital oil. Japan, vital to American interests, received 85 per cent of all its oil from the Gulf via the Indian Ocean, and Europe about 50 per cent.

Yet neither side invested very substantially in a naval presence in the ocean. Both were held back by communications difficulties, as the ocean was far from their major bases, let alone their home states. 11 Was only on exceptional occasions that either side displayed any great interest. In 1971 the United States was worried about India's role in 'liberating' Bangladesh

from the control of Pakistan. Henry Kissinger sent a task force of the Seventh Fleet, led by the USS *Enterprise*, to the Bay of Bengal. However, it seems that this action, although seen as threatening by India, in fact was designed to warn China not to intervene. In 1979 the Soviets invaded Afghanistan, and the Shah, an American client, lost Iran. Briefly the Indian Ocean area became again a central part of the Cold War. The unhappy result was that India was armed by the Soviets, Pakistan by the United States, and so their existing tense relations, and ability to attack each other, were exacerbated by the actions of the two major players in the Cold War.

It is true that this relatively benign view owes something to hindsight. At the time it was understandable that analysts and policy makers took things more seriously. In the 1980s there was a major build-up of strategic weapons in the ocean, with both sides deploying nuclear submarines. Perhaps even more worrying, by the mid 1980s India had a nuclear capacity, even if this was not publicly announced, while Pakistan also had one potentially, which however they chose not to finalise in deference to United States wishes. 94 This period of opaque nuclear capability was ended by the overt nuclear tests of May 1998.

One consequence of the Cold War was that the United States built a major base on the island of Diego Garcia. This island was very well located, being more or less in the middle of the ocean, roughly latitude 7° S and longitude 72° E, 1,600 km south of India. It is an instructive story. It begins as early as 1961 with an agreement between Harold Macmillan and John F. Kennedy. As early as this the British wanted an increase in the American presence in the Indian Ocean, and the United States provided them with nuclear missiles as a quid pro quo. From the American angle, a well-located base in the ocean would help to secure the passage of vital oil tankers, and would bring most of the Soviet Union within range of Polaris missiles. It also meant American warships could operate more readily in the Indian Ocean, rather than have to come all the way from the existing major base, Subic Bay in the Philippines. The Seventh Fleet, for example, could reach Mumbai in three days steaming from Diego Garcia.

The detail is rather sordid. In 1965 Mauritius was promised independence, but Harold Wilson, at American insistence, said the condition was that they

give up part of their territory, the Chagos Archipelago. The soon-to-be independent state was also given £3 million in 'development assistance'. The British turned Chagos into the British Indian Ocean Territories. A year later, in 1966, one of the islands, Diego Garcia, with an area of about 11 square miles, was leased to the United States. The United States wanted an area where there was no population, and the British obliged by removing the 1,000 inhabitants of the island to Mauritius, where they were left to rot. When these people, the Ilois, complained to the Americans about their treatment they were told it was a matter for the British government, not the United States.95

Diego Garcia has played a major role in United States actions in the Middle East, notably during the Gulf War of 1991, and the current (2001–02) 'war against terrorism'. They built a communications site on the island in 1971, and by the mid 1970s this was a major naval air base. The runway can handle any sort of plane, the port can accommodate an entire battle carrier group. In the late 1980s the island was populated by over 2,000 United States servicepeople, and 1,200 Filipinos to do food service and domestic work. At any one time about 800 personnel are ashore from ships in the harbour.96 Yet in essence United States interest in the Indian Ocean is strictly limited. They have no such hegemonic designs as were enforced by the Royal Navy for over a century. Rather, they want to be able to respond to any threat which affects their perceived interests, but no more. Just as Lord Curzon said that Britain took no interest in what the Arabs did inland. so also the Americans care little for any possible hostilities between various states around the ocean, provided oil supplies are not threatened. The crisis following the terrorist attacks on New York and Washington in September 2001 provides further support for this analysis, for they obviously constituted a threat to American interests and so elicited a massive response.

It should be remembered that the Indian Ocean differs in an important respect from the Pacific and Atlantic oceans, for in these two several major powers have interests and borders: no major power is located on the Indian Ocean littoral. No local navy has come close to achieving a major role, let alone dominance, in the ocean. The end of the Cold War has removed any significant Russian presence. Southeast Asian states have minor naval

capacity, designed to patrol to stop refugees and to curtail piracy. Australia's navy similarly has almost no blue water capacity, and as I write is merely patrolling to stop any influx of refugees, a demeaning role indeed. Today the only major blue water navy from a littoral country is India's.

When India and Pakistan became independent in 1947 British governments thought that India's role should be to provide, within a Commonwealth structure, assistance to the West to curtail China and the Soviet Union. India's navy was not really oriented towards Indian interests, but rather was to act as a minor ally in the effort to contain communism. It was not until 1958 that an Indian became Chief of Naval Staff, and some English officers continued to serve in the Indian navy until the early 1960s. The navy was neglected, the army was privileged. In 1962, on the eve of the war with China, the Indian Navy got 4.7 per cent of the defence budget, the army 77.5 per cent and the air force 17.8 per cent. After dependence on Britain ended, India simply moved to relying more or less totally on the Soviet Union: by the end of the 1980s seventy per cent of Indian military hardware came from the USSR.97 This did however enable a larger blue water role for the Indian Navy. The Indian press over the last few years has reported on quite major and far-reaching naval exercises. The aim is for the navy to 'wield appreciable influence on the waters extending from the periphery of the Persian Gulf in the west to the Strait of Malacca to the east.' The larger plan is for the Indian Navy 'to acquire a limited blue water capability as well as a restricted capacity to launch a seaward attack on land.'98 Indian Navy ships have even undertaken exercises past the Straits of Melaka in the South China Sea, in conjunction with the Vietnamese navy. India today has the seventh largest navy in the world. In early 2002 they were negotiating to buy a second aircraft carrier from Russia, and to lease two nuclear-powered submarines.99

India was assuming what it considered to be its natural role in the ocean, that is as the dominant local power. It was claimed that this had to do with India's size, and its location across major sea routes. Nehru claimed just before independence that 'Geography is a compelling factor, and geographically she [India] is so situated as to be the meeting point of Western and Northern and Eastern and South-East Asia.'100 On several visits to India I have had social dealings with young Indian Navy officers, a

very suave and elite group of men with impeccable manners. When they found out I was from Australia they expressed polite interest, and talked about cricket. But I had a strong sense that they were thinking to themselves, 'We could take out you Australians without too much trouble,' as indeed they could. India's self-perception as the main player in the Indian Ocean even extended as far south as Antarctica, where India has assumed a vigorous role as various treaties allocate areas of interest.

For a time this expanded role was looked on benevolently by the Americans, and cooperation between the two navies increased. India's ties with Russia were much less of a problem once the Cold War was over, and the country was seen by the Americans as being a democracy, and essentially status quo. Thus it could to an extent take over some of America's role in the Indian Ocean. Once India freed up its economy, in the early 1990s, it became something of a favourite with American investors. Similarly, there are strong ties, and much exchange of personnel, between computer specialists in California's Silicon Valley and the Indian equivalent in Bangalore. India was favoured over Pakistan in the 1990s.

It is unclear to neighbouring states, and especially Pakistan, whether India wants its navy to play a defensive, or an offensive, role. Certainly India, especially under a more nationalistic and even chauvinistic BJP government, has made it clear that they expect as of right to be seen as the dominant local power in the Indian Ocean, but this does not necessarily mean any aggressive role. Indeed, despite the exercises and projection of Indian power all around the ocean, there are also major problems. The collapse of the Soviet Union and liberalisation of the economy had a directly restricting result for the Indian Navy. One influential commentator complained that the navy is still the poor relation. Ships are usually at sea only seven days in every month, and the number of frigates and destroyers has gone down between 1976 and 1996 from thirty-one to twenty-four. 101 The focus of the Indian defence establishment has always been on Pakistan, with the conflict in Kashmir central, and this is a matter where navies have little role to play. Two recent events may have altered significantly the whole strategic situation. In May 1998 both India and Pakistan became overt nuclear states. The 'war against terror' after September 2001 has produced a whole new scenario, where at least for a time America is much more supportive of Pakistan. The re-entry of America in force into the region is obviously a significant event whose consequences are yet to be fully worked out.

Beneath these high policy matters, there are other roles for the region's navies to play. Coastguard duty, to stop smuggling, continues to be a major preoccupation. The other important task, especially in southeast Asia, is the need to combat piracy, which in the last few decades has had something of a revival. In the past, in the Sulu Sea, pirates ventured out in proas with matting sails and slave rowers. Today they have diesel-powered fast craft, armed with bazookas, machine guns and Molotov cocktails. Off Somalia they even have mortars and rocket propelled grenades. They use satellite navigation systems, and often have pre-arranged buyers for both the cargo and the ships they capture. In the first half of 1998 there were eighty-six recorded acts of piracy world wide. Of these, thirty-eight were in southeast Asian waters, and fourteen in the area around South Asia.102

Combating piracy has to be a multilateral task, and indeed it may be that if cooperation between the states rimmed around the ocean is achieved there will be less need for navies. So far the results have been disappointing. The lead was taken by Jawaharlal Nehru shortly before Indian independence. At an Asian Relations Conference in March 1947 he put forward the idea of some sort of unity around the Indian Ocean. Nothing happened until the 1970 Non-Aligned Meeting in Lusaka, when the notion of a Zone of Peace, including all the Indian Ocean, was adopted. The next year Mrs Bandaranaike, Prime Minister of Sri Lanka, brought the concept to the United Nations General Assembly, where it was adopted in December 1971. Despite support from all the littoral states, neither the Soviet Union nor the United States were interested. India, perhaps hoping to become the dominant regional power, got the initial proposal watered down so that it referred only to limiting the activities of powers from outside the region. An Ad Hoc Committee on the Indian Ocean was set up to study the implications, but nothing came of this. 103

Some years later, in 1984, an Indian Ocean Commission was set up. The founding members were Mauritius, Madagascar and the Seychelles. Later France, on behalf of Reunion, and the Comoros, joined. 104 In the last five

years of the twentieth century a flurry of activity produced IOR-ARC: the Indian Ocean Rim Association for Regional Cooperation. Founded in Mauritius in March 1997, by the end of 1999 it had nineteen members and two levels of activity. One level is inter-governmental relations, and the other involves academics and business people. The aim was to promote economic cooperation between the member states, which included Australia, India, Indonesia, Kenya, Madagascar, Malaysia, Mauritius, Mozambique, Oman, Singapore, South Africa, Sri Lanka, Tanzania and Yemen, and Bangladesh, Iran, Seychelles, Thailand and the United Arab Emirates. Pakistan was required to change some discriminatory trade policies before it could join. Dialogue partners included Egypt, the United Kingdom, Japan and China. 105

The context for this initiative was the fall of the Soviet Union and so the end of the Cold War, the end of apartheid in South Africa, and the trend towards globalisation which we described earlier. It is believed that there is now less ideological conflict in the world, with only the capitalist paradigm retaining any credibility. Be that as it may, the member states have very different interests, economies and political systems, and it difficult to see such a disparate grouping making any real progress towards regional cooperation and integration. Many of its members also belong to other, possibly conflicting, associations, such as SAARC (South Asian Association for Regional Cooperation), ASEAN (Association of Southeast Asian Nations) and APEC (Asia–Pacific Economic Cooperation). Furthermore, much economic activity in the whole region is oriented to the outside. In contrast with the close economic association of states around the Northern Atlantic, intra-Indian Ocean trade makes up less than one-quarter of total trade; the global dimension reduces the possibility of effective economic cooperation around the ocean. One's confidence is not enhanced by one of the actions of the meeting in January 2000, when it was agreed to set up a 'duty-free commissary for the sale of limited quantities of certain articles for personal use or consumption by members.'106

We can conclude by considering whether these halting attempts at unity or at least some form of cooperation can be seen as a paradigm which reflects a general lack of unity in other aspects of the life of the Indian Ocean. Is there something called 'the Indian Ocean', which we can treat as a viable category for analysis and study, as valid as the more usual objects of historical study such as classes or states? We are here coming back again to the distinction between the history *of* the ocean, an internal one, and history *in* the ocean, where it is to be seen as profoundly influenced by wider matters coming from outside its geographical boundaries. In short, if the latter is most important serious doubt must be cast on the notion of writing a history of the ocean. My conclusion is that for much of the long timeframe of this book we can indeed write *of* the ocean. Indeed, given my scepticism about the degree of influence of the early Europeans, one could somewhat arbitrarily say that the Indian Ocean remains relatively discrete, something which can be studied in and of itself, until roughly the end of the eighteenth century. As I have tried to make clear in these last two chapters, it is only since around 1800 that forces from outside had any very profound influence: crudely put, first industrialised Britain, and now globalisation.

Two interlocking matters are significant here. On the one hand, although nearly half the world's population lives within 80 km of the sea, maritime matters have little influence today. Certainly the mystique of the sea is gone. Most people fly *over* the ocean, rather than sail *on* it. Age-old routes connecting parts of our ocean are no longer plied by passenger ships; only a few short-distance ferries remain. Some people still do travel by sea: pirates, refugees, drug traffickers who find it much easier to import illicit bundles when there is no airport security involved. For most the ocean now is simply a place for recreation, and indeed modern technology has reduced this to a very sparsely maritime experience. An American scholar wrote scathingly about the ultimate in the alienation of people from the sea. The typical beachgoer today is a fat person in a huge four-wheel drive who speeds up the beach, scattering sand and crushing delicate marine life, to park facing the ocean. This person stays inside, with the engine running so that the air conditioning will keep working. 107 He is writing about the American Atlantic shore, but this stage is getting closer by the day around the Indian Ocean also. Cruise ships try to replicate landed society, and come close to succeeding. The most important warships today, aircraft carriers, are not really maritime at all. Again landed society is faithfully created on board these monsters, and in essence they are airfields which happen to be able to float. But what of trade? Certainly most trade in the ocean is still

done by sea: in the case of India 90 per cent of its overseas trade arrives over water. But then most economic activity in India is internal, so that for example the sanctions imposed after the nuclear tests of May 1998 had little effect. In any case, sea trade today is not carried on by a race of men set apart, the sort of people we have encountered so often in this book, and whom Conrad, Villiers, and many others celebrated. Rather it is handled in unappealing oil tankers and bulk carriers. The crews are essentially low-paid unskilled labourers, who could as well be working on a building site or in a factory. This separation of mankind from the sea is likely to be amplified in the near future, for today it is technologically possible to sail a ship from one port to another with no one on board. Labour would be required only to leave one port and enter the other.

Yet in one ominous area the sea, and the Indian Ocean, may even see an expansion of interest from the land. Most of the oceans of the world are still part of the commons, that is the areas beyond the 200 nautical mile limit. One scholar wrote forebodingly,

As the UN celebrates 1998 as the International Year of the Oceans, conflicts over multiple peaceful uses of the ocean and coastal areas – such as commercial and recreational fisheries, oil development, marine aquaculture, marine transport, marine recreation, etc – proliferate. The living resources of the seas are coming under intensifying pressures and military (ab)uses of the oceans (such as refusing to share oceanographic information) continue despite the ending of the Cold War. Coastal-based communities are increasingly displaced and marginalised by the destruction of littoral and marine resources. The oceans are also being used as a dumping ground for effluents and even radioactive nuclear waste. 108

As vital supplies dry up the ocean will be under increasing pressure to make up shortfalls, in for example oil, or gas, or fish to feed an expanding global population. It could well be that the oceans at present are benefiting from only a transitory respite before full-scale exploitation begins. Very deep sea trawling, penetrating down 1.5 km, is already having profoundly detrimental effects. Deep sea mining is not yet a problem; the technology is not yet ready, and minerals' prices have been relatively low over the past few decades. There is no reason to assume that either of these will apply in coming decades. At present people ignore the sea: soon they may destroy it.

The Indian Ocean cannot expect to be spared from this catastrophic prospect.

Notes

Introduction

- 1 Joseph Conrad, *Typhoon*, *and other Tales*, New York, New American Library, 1963, p. 42 (from 'The Nigger of the "Narcissus").
- 2 Ibid., p. 43.
- 3 Himanshu Prabha Ray and Jean-Francois Salles, eds, *Tradition and Archeology: Early Maritime Contacts in the Indian Ocean*, New Delhi, Manohar, 1996, p. 1.
- 4 Julian Reade, 'Evolution in Indian Ocean Studies', in J. Reade, ed., *Indian Ocean in Antiquity*, London, Kegan Paul, 1996, p. 13. For a similar complaint, and solution, concerning Malay history see V.J.H. Houben et al., eds, *Looking in Odd Mirrors: the Java Sea*, Leiden, University of Leiden, 1992, Introduction, p. viii.
- 5 Pierre Chaunu, *European Expansion in the Later Middle Ages*, Amsterdam, North Holland Publishing Co., 1979, p. 218.
- 6 O.H.K. Spate, *The Pacific since Magellan*, Canberra, Australian National University Press, 1979–88, 3 vols, I, p. ix.
- 7 Andre Gunder Frank, *ReOrient*, Berkeley, University of California Press, 1998.
- 8 Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, London, Collins 1972, 2 vols; Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History*, Vol. I, Oxford, Blackwell, 2000.
- 9 Horden and Purcell, *The Corrupting Sea*, p. 127.
- 10 Predrag Matvejevic, *Mediterranean: A Cultural Landscape*, Berkeley, University of California Press, 1999.

- 11 Frank Broeze, *Island Nation: A History of Australians and the Sea*, Sydney, Allen & Unwin 1998; Michel Mollat du Jourdin, *Europe and the Sea*, Oxford, Blackwell, 1993; Ashin Das Gupta and M.N. Pearson, eds, *India and the Indian Ocean*, *1500–1800*, Calcutta, Oxford University Press, 1987, 2nd ed., New Delhi, Oxford University Press, 1999.
- 12 Horden and Purcell, *The Corrupting Sea*, p. 42.
- 13 Frank Broeze, review of P. Butel, *The Atlantic*, London, Routledge, 1999, in *International Journal of Maritime History*, XII, 1, June 2000, pp. 266, 268. For his notions of what maritime history is see *Great Circle*, Inaugural Newsletter, October 1978, p. 7, and 'From the Periphery to the Mainstream', *Great Circle*, XI, l, 1989, p. 6.
- 14 Chaunu, European Expansion, p. 219.
- 15 The same point has been made about Europe: see David Kirby and Merja-Liisa Hinkkanen, *The Baltic and the North Seas*, London, Routledge, 2000, p. 58.
- 16 Braudel, *The Mediterranean and The Mediterranean World*, p. 276.
- 17 Horden and Purcell, *The Corrupting Sea*, p. 523.
- 18 K.N. Chaudhuri, *Trade and Civilization in the Indian Ocean: An Economic History from the Rise of Islam to 1750*, Cambridge, Cambridge University Press, 1985, p. 3.
- 19 K.N. Chaudhuri. 'The Unity and Disunity of Indian Ocean History from the Rise of Islam to 1750: The outline of a theory and historical discourse', *Journal of World History*, IV, 1, 1993, especially pp. 1, 7.
- 20 Niels Steensgaard, 'The Indian Ocean Network and the Emerging World-Economy, c. 1500–1750', in Satish Chandra, ed., *The Indian Ocean: Explorations in History, Commerce and Politics*, New Delhi, Sage, 1987, pp. 127–8.
- 21 R.J. Barendse, *The Arabian Seas*, *1640–1700*, Leiden, Research School, CNWS, Leiden University,1998, p. 60.
- 22 R.J. Barendse, 'Trade and State in the Arabian Seas: A Survey from the Fifteenth to the Eighteenth Century', *Journal of World History*, XI, 2, 2000, p. 173.

- 23 A.J.R. Russell-Wood, *A World on the Move: The Portuguese in Africa, Asia, and America, 1415–1808*, New York, St Martin's Press, 1992; Fernand Braudel, *Civilization and Capitalism*, New York, Harper & Row, 3 vols., 1981–84.
- 24 Braudel, *The Mediterranean and the Mediterranean World*, pp. 104 et seq., 296–7.
- 25 Romila Thapar, 'Early Mediterranean Contacts with India: An Overview', in F. De Romanis and A. Tchernia, eds, *Crossings*, New Delhi, Manohar, 1997, p. 1.
- 26 Robert Harms Lecture, Brown University, 12 October 2000.
- 27 James Heimann, 'Small Change and Ballast: Cowry Trade and Usage as an Example of Indian Ocean Economic History', *South Asia*, n.s. III, 1, 1980, pp. 48–69
- 28 Jennifer Ackerman, 'New Eyes on the Oceans', *National Geographic*, October 2000, p. 113.
- 29 Judith Gabriel, 'Among the Norse Tribes: The Remarkable Account of Ibn Fadlan', *Aramco World*, November–December 1999, pp. 36–42.
- 30 David Parkin and Stephen C. Headley, eds, *Islamic Prayer across the Indian Ocean: Inside and Outside the Mosque*, Richmond, Curzon, 2000, pp. 2–3.
- 31 Sydney Morning Herald, 9–10 June, 2001
- 32 Horden and Purcell, *The Corrupting Sea*, p. 43.
- 33 Quoted in Philip Edwards, *The Story of the Voyage: Sea Narratives in Eighteenth-Century England*, Cambridge, Cambridge University Press, 1994, p. 1.
- 34 This is a rough but valid comparison. I have included Egypt and Iran, but not all of Indonesia. Even so, this is not a book about India and the Indian Ocean, it is about the Indian Ocean tout court.
- 35 Matvejevic, Mediterranean, p. 142.
- 36 Horden and Purcell, *The Corrupting Sea*, p. 5.
- 37 Braudel, *The Mediterranean and the Mediterranean World*, p. 18.

- 38 Spate, *The Pacific*, I, p. x.
- 39 Tom Vosmer, 'Maritime Archaeology, Ethnography and History in the Indian Ocean: An Emerging Partnership', in Himanshu Prabha Ray, ed., *Archaeology of Seafaring: The Indian Ocean in the Ancient Period*, Delhi, Pragati Publications, 1999, p. 298.
- 40 Sydney Morning Herald, 13 April, 2000.
- 41 Janet Abu-Lughod, 'The World-System Perspective in the Construction of Economic History', in Philip Pomper et al., eds, *World History: Ideologies, Structures and Identities*, Oxford, Blackwell, 1998, p. 75.

1 Deep structure

- 1 Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, London, Collins, 1972, 2 vols, p. 353.
- 2 Frank Broeze, 'Introduction', in Frank Broeze, ed., *Brides of the Sea: Port Cities of Asia from the 16th-20th Centuries*, Sydney, New South Wales University Press, 1989, pp. 3, 21.
- 3 Chandra Richard de Silva, 'Indian Ocean but not African Sea', *Journal of Black Studies*, XXIX, 5, May 1999, pp. 684–94.
- 4 Alan Villiers, The Indian Ocean, London, Museum Press, 1952, pp. 5, 17; Central Intelligence Agency (CIA), Atlas of the Indian Ocean, Washington, CIA, n.d., pp. 3–5.
- 5 CIA World Factbook, 2000, available HTTPhttp://www.cia.gov.cia/publications/ factbook>, accessed 24 November 1999; see 'Indian Ocean'.
- 6 Robert K. Headland, *Chronological List of Antarctic Expeditions and Related Historical Events*, Cambridge, Cambridge University Press, 1989, pp. 12–13.
- 7 For a very technical discussion see Vivian Louis Forbes, *The Maritime Boundaries of the Indian Ocean Region*, Singapore, National University of Singapore, 1995.
- 8 John O'Kane, trans. and ed., *The Ship of Sulaiman*, London, Routledge & Kegan Paul, 1972, p. 163.

- 9 Joseph Conrad, *Typhoon*, *and other Tales*, New York, New American Library, 1963, 'The Shadow Line,' p. 380.
- 10 O'Kane, *The Ship of Sulaiman*, pp. 159–60.
- 11 Donald K. Emmerson, 'The Case for a Maritime Perspective on Southeast Asia', *Journal of Southeast Asian Studies*, XI, l, March 1980, pp. 139–45.
- 12 Abu Zaid Hasan ibn Yazid, *Ancient Accounts of India and China*, London, printed for Sam. Harding, 1733, p. 93. For a comparable account from 1876 see an extended description, including of Jiddah, in Isabel Burton, *A.E.I. Arabia*, *Egypt, India: A Narrative of Travel*, London, W. Mullan and Son, 1879, pp. 71–100
- 13 Muhammad ibn Ahmad Ibn Jubair, *The Travels of Ibn Jubayr (1183–1185 AC)*, trans. R.J.C. Broadhurst, London, Jonathan Cape, 1952, pp. 69 et seq.
- 14 Daniel's account in William Foster, ed., *The Red Sea*, London, Hakluyt Society, 1949, pp. 64–70.
- 15 Tomé Pires, *The Suma Oriental of Tomé Pires*, ed. A. Cortesão, London, Hakluyt Society, 1944, 2 vols, I, p. 9.
- 16 Jacques-Yves Cousteau, *The Living Sea*, New York, Nick Lyons Books, 1963, p. 33. Isabel Burton (pp. 93–9) noticed this in January 1876: the locals told her it was a consequence of the opening of the Suez Canal.
- 17 Isabel Burton, A.E.I., p. 99.
- 18 Marco Polo, *The Book of Ser Marco Polo*, trans. and ed. Henry Yule and Henri Cordier, London, John Murray, 1921, 2 vols, I, 108. Deltas, such as the Hughli, could be just as dangerous. For a harrowing account of the Rufiji delta in Tanzania see Alan Villiers, *Sons of Sinbad*, New York, C.Scribner's Sons, 1940, pp. 191–2.
- 19 Felipe Fernández-Armesto, 'The Indian Ocean in World History', in Anthony Disney and Emily Booth, eds, *Vasco da Gama and the Linking of Europe and Asia*, New Delhi, Oxford University Press, 2000, p. 16.
- 20 See his contribution in F. Bethencourt and D. Ramada Curto, eds, *Portuguese Expansion*, *1400–1822: A Collection of Essays*, New York, Cambridge University Press, forthcoming.

- 21 Colonel James Capper, *Observations on the Passage to India through Egypt and across the Great Desert* . . ., 2nd ed., London, Printed for W. Faden, 1784, p. vi.
- 22 M. Lesourd, 'Notes sur les Nawakid, Navigateurs de la Mer Rouge', *Bolletin de l'Institute Français d'Afrique Noire*, Serie B, Dakar, vol. XX, 1960, pp. 346–55, especially pp. 349–50.
- 23 Fernão Lopes de Castanheda, *História do descobrimento e conquista da India pelos Portugueses*, 3rd ed., Coímbra, Impr. da Universidade, 1924–33, 9 vols, VIII, xliii.
- 24 William Foster, ed., *Early Travels in India*, Delhi, S. Chand, 1968, pp. 301–2.
- 25 G.R. Tibbetts, *Arab Navigation in the Indian Ocean before the Coming of the Portuguese*, London, Royal Asiatic Society of Great Britain and Ireland, 1971, p. 231, and cf. pp. 360–82 for a gloss by Tibbetts on the dictatorship of the monsoons. On pp. 225–42 is Ibn Majid on the monsoons in the whole Indian Ocean.
- 26 Elaine Sanceau, 'Uma Narrativa da Expedição Portuguesa de 1541 ao Mar Roxo', *Studia*, IX, 1962, pp. 199–234 [letter of D. Manuel de Lima to King, Goa, 18 November 1541]. The account is from pp. 226–7.
- 27 George F. Hourani, revised and expanded by John Carswell, *Arab Seafaring in the Indian Ocean in Ancient and Medieval Times*, Princeton, Princeton University Press, 1995, p. 150; Tim Severin, *The Sinbad Voyage*, London, Hutchinson, 1982, passim.
- 28 Thor Heyerdahl, *The Tigris Expedition: In Search of our Beginnings*, Garden City, Doubleday, 1981, pp. 187, 222.
- 29 Alexander Frater, *Chasing the Monsoon*, Harmondsworth, Penguin, 1991, p. 23.
- 30 CIA, Atlas, p. 7.
- 31 Alan Villiers, *The Set of the Sails: The Adventures of a Cape Horn Seaman*, London, Pan, 1955 (first ed. 1940), p. 246.
- 32 Villiers, *Indian Ocean*, pp. 11–12.
- 33 Des Kearns, World Wanderer, Sydney, Angus & Robertson, 1971, p. 63.

- 34 Villiers, *Indian Ocean*, p. 13. See a stunning description in Patrick O'Brian's novel *H.M.S. Surprise*, Bath, Chivers Press, 2000, pp. 260–87.
- 35 Villiers, *Set of the Sails*, p. 84.
- 36 Daniel Behrman, *Assault on the Largest Unknown: The International Indian Ocean Expedition,* 1959–65, Paris, Unesco Press, 1981, p. 33; P. Bellwood, 'From Bird's Head to Bird's Eye View: Long Term Structures and Trends in Indo-Pacific Prehistory', in J. Miedema, C. Ode and R.A.C. Dam, eds, *Perspectives on the Bird's Head of Irian Jaya, Indonesia*, Amsterdam, Rodopi, 1998.
- 37 Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History*, Vol. I, Oxford, Blackwell, 2000, p. 310.
- 38 Anthony Reid, 'The System of Trade and Shipping in Maritime South and Southeast Asia, and the Effects of the Development of the Cape route to Europe', in H. Pohl, ed., *The European Discovery of the World and its Economic Effects on Pre-Industrial Society, 1500–1800*, Stuttgart, F. Steiner, 1990, pp. 94–5.
- 39 Jennifer Ackerman, 'New Eyes on the Oceans', *National Geographic*, October 2000, pp. 92–3.
- 40 Jerónimo Lobo, *The Itinerary of Jerónimo Lobo*, trans. Donald M. Lockhart, London, Hakluyt Society, 1984, p. 308.
- 41 Maria Graham, Journal of a Residence in India, Edinburgh, A. Constable, 1813, p. 174.
- 42 Sir James Lancaster, *The Voyage of Sir James Lancaster to Brazil and the East Indies*, *1591–1603*, ed. W. Foster, Hakluyt Society, 1940, pp. 8–9.
- 43 A.J.R. Russell-Wood, *A World on the Move: The Portuguese in Africa, Asia, and America, 1415–1808*, New York, St Martin's Press, 1992, p. 98.
- 44 Heyerdahl, *The Tigris Expedition*, p. 71.
- 45 Mrs Jemima Kindersley, *Letters from the Island of Teneriffe, Brazil, the Cape of Good Hope, and the East Indies*, London, J. Nourse, 1777, p. 81.

2 Humans and the sea

- 1 Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, London, Collins, 1972, 2 vols, I, p. 276.
- 2 This terminology has to be distinguished from the use, *pace* Horden and Purcell, of a history *of* the sea, as compared with history *in* the sea.
- 3 K.N. Chaudhuri, *Trade and Civilization in the Indian Ocean: An Economic History from the Rise of Islam to 1750*, Cambridge, Cambridge University Press, 1985, p. 160.
- 4 Predrag Matvejevic, *Mediterranean: A Cultural Landscape*, Berkeley, University of California Press, 1999, p. 66.
- 5 Braudel, *The Mediterranean*, pp. 168, 170. See also Sugata Bose's essay 'Space and Time in the Indian Ocean Rim: Theory and History', in Leila Tarazi Fawaz and C.A. Bayly, eds, *Modernity and Culture: From the Mediterranean to the Indian Ocean*, New York, Columbia University Press, 2002, pp. 365–88.
- 6 Jorge Manuel Flores, *Os Portugueses e o Mar de Ceilão: Trato, Diplomacia e Guerra (1498–1543)*, Lisbon, Cosmos, 1998.
- 7 Jean-Claude Penrad, 'Societies of the Ressac: The Mainland meets the Ocean', in David Parkin, ed., *Continuity and autonomy in Swahili Communities: inland influences and strategies of self-determination*, London, SOAS, 1994, pp. 41–8.
- 8 H. Neville Chittick, 'East Africa and the Orient: Ports and Trade Before the Arrival of the Portuguese', in C. Mehaud, ed., *Historical Relations across the Indian Ocean*, Paris, UNESCO, 1980, p. 13.
- 9 Ralph Austen, *African Economic History: Internal Development and External Dependency*, London, James Currey, 1987, p. 58.
- 10 Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History*, vol. I, Oxford, Blackwell, 2000, pp. 151, 377.
- 11 Ibid, p. 267.

- 12 H.W. Van Santen, 'Trade between Mughal India and the Middle East, and Mughal Monetary Policy, c. 1600–1660', in Karl Reinhold Haellquist, ed., *Asian Trade Routes: Continental and Maritime*, London, Curzon Press, 1991, p.90.
- 13 Jacques-Yves Cousteau, Life and Death in a Coral Sea, Garden City, NY, Doubleday, 1971, p. 79.
- 14 Frank Broeze, 'Introduction', in Broeze, ed., *Gateways of Asia: Port Cities of Asia from the 13th to the 20th Centuries*, London, Kegan Paul International, 1997, pp. 3–4.
- 15 Matvejevic, Mediterranean, pp. 13–14.
- 16 Audrey N. Clark, *Longman Dictionary of Geography*, Essex, Essex University Press, 1985, s.v. 'umland'.
- 17 Perhaps the best discussion is Frank Broeze, 'The External Dynamic of Port City Morphology: Bombay, 1815–1914', in Indu Banga, ed., *Ports and their Hinterlands in India, 1700–1950*, New Delhi, Manohar, 1992, pp. 245–52. See also B.S. Hoyle, 'Maritime Perspectives on Ports and Port Systems: The Case of East Africa', in Frank Broeze, ed., *Brides of the Sea: Port Cities of Asia from the 16th-20th Centuries*, Sydney, University of New South Wales Press, 1989, pp. 188–93. K.N. Chaudhuri has also contributed here: see his *Trade and Civilisation*, pp. 98–118; 160–81.
- 18 Rhoads Murphey, 'On the Evolution of the Port City', in Broeze, ed., *Brides of the Sea*, p. 225. This fine article, and the book in which it appears, made a most substantial contribution to the study of port cities.
- 19 W.G. Palgrave, quoted in Fouad Ajami, *The Dream Palace of the Arabs*, New York, Pantheon Books, 1998, p. 154,
- 20 Muhammad ibn Ahmad Ibn Jubair, *The Travels of Ibn Jubayr (1183–1185 AC)*, trans. R.J.C. Broadhurst, London, Jonathan Cape, 1952, pp. 63–4.
- 21 M.D.D. Newitt, A History of Mozambique, London, Hurst, 1994, pp. 12, 31, 141 et seq.
- 22 Himanshu Prabha Ray, 'Introduction', in Ray and Jean-Francois Salles, eds, *Tradition and Archeology: Early Maritime Contacts in the Indian Ocean*, New Delhi, Manohar, 1996, p. 2.

- 23 A. Vallavanthara, *India in 1500 AD: The Narrative of Joseph the Indian*, Mannanam, Research Institute for Studies in History, 1984, pp. 152–5.
- 24 Rhoads Murphey, 'The City in the Swamp: Aspects of the Site and Early Growth of Calcutta', *Geographical Journal*, 130, 1964, pp. 241–56.
- 25 Shireen Moosvi, 'The Gujarat Ports and their Hinterland', in Indu Banga, ed., *Ports and their Hinterlands*, pp. 121–9.
- 26 Gillian Tindall, *City of Gold: The Biography of Bombay*, Penguin, Harmondsworth, 1992, pp. 24–8.
- 27 Maria Graham, *Journal of a Residence in India*, Edinburgh, A. Constable, 1812, pp. 123–4.
- 28 Lady Isabel Burton, *A.E.I. Arabia*, *Egypt*, *India: A Narrative of Travel*, London, W. Mullan and Son, 1879, pp. 298, 379–81.
- 29 Burton, A.E.I., pp. 69, 73.
- 30 Tim Winton, *Land's Edge*, Sydney, Macmillan, 1993, p. 23.
- 31 Lena Lencek and Gideon Bosker, *The Beach: The History of Paradise on Earth*, New York, Viking, 1998, pp. xx, xvii-iii.
- 32 W.J. Dakin, *Australia's Seashores*, new ed. by Isobel Bennett, Sydney, Angus & Robertson, 1987, preface, n.p., and p. 4.
- 33 Emily Eden, *Up the Country*, London, Curzon Press, 1978, p. 3.
- 34 Greg Dening, Islands and Beaches, Chicago, University of Chicago Press, 1988, p. 34.
- 35 J.C. Heesterman, 'Littoral et Intérieur de l'Inde,' *Itinerario* 1, 1980, p. 89.
- 36 Braudel, *The Mediterranean*, p. 17. See also David Sopher, *The Sea Nomads*, Singapore, Printed by Lim Bian Han, Government printer, 1965, p. 1 for a classic discussion of the strand.
- 37 John Middleton, *The World of the Swahili*, *An African Mercantile Civilisation*, New Haven, Yale University Press, 1992, p. 9.

- 38 Randall L. Pouwels, *Horn and Crescent: Cultural Change and Traditional Islam on the East African Coast, 800–1900*, Cambridge, Cambridge University Press, 1987, p. 31. See also Mark Horton and John Middleton, *The Swahili: The Social Landscape of a Mercantile Society*, Oxford, Blackwells, 2000, pp. 5–8 (pp. 6–7 is a map).
- 39 Cousteau, Life and Death, pp. 56–7.
- 40 Jan Knappert, 'East Africa and the Indian Ocean', in J.C. Stone, ed., *Africa and the Sea: Proceedings of a Colloquium at the University of Aberdeen*, *March*, *1984*, Aberdeen, University of Aberdeen, 1985, p. 125.
- 41 G.S.P. Freeman-Grenville, 'The Sidi and Swahili', in his *The Swahili Coast*, *2nd to 19th centuries: Islam, Christianity, and Commerce in Eastern Africa*, London, Variorum, 1988, no. XVII.
- 42 Dr John Fryer, *A New Account of East India and Persia*, London, Hakluyt, 1909–15, 3 vols, I, p. 197.
- 43 Quoted by the editor, William Crooke, in Fryer, ibid.; Maria Graham, *Journal*, p. 35.
- 44 Lotika Varadarajan, 'Traditions of Indigenous Navigation in Gujarat', *South Asia*, n.s. III, 1, 1980, pp. 28–35.
- 45 A. Jan Qaisar, 'From Port to Port: Life on Indian Ships in the Sixteenth and Seventeenth Centuries', in Ashin Das Gupta and M.N. Pearson, eds, *India and the Indian Ocean*, 1500–1800, Calcutta, Oxford University Press, 1987, pp. 334–5.
- 46 J.H. van Linschoten, *The Voyage of John Huyghen van Linschoten to the East Indies*, Hakluyt, London, 1885, 2 vols, I, pp. 227–8.
- 47 Claudio Magris, *Microcosms*, London, Harvill Press, 1999, p. 57.
- 48 Dakin, *Australia's Seashores*, p. 6. See especially the excellent discussion in Donald K. Emmerson, 'The Case for a Maritime Perspective on Southeast Asia', *Journal of Southeast Asian Studies*, XI, l, March 1980, pp. 143–4.
- 49 Moira Tampoe, Maritime Trade between China and the West: An Archaeological Study of the Ceramics from Siraf (Persian Gulf), 8th to 15th Centuries AD, Oxford, B.A.R., 1989, p. 124.

- 50 Wilfred Thesiger, *The Marsh Arabs*, London, Longmans, 1964, p. 51.
- 51 Ibid., p. 28.
- 52 Thor Heyerdahl, *The Tigris Expedition: In Search of our Beginnings*, Garden City, Doubleday, 1981, p. 15.
- 53 Thesiger, *Marsh Arabs*, p. 107.
- 54 Ibid., p. 1.
- 55 Gavin Young, *Return to the Marshes: Life with the Marsh Arabs of Iraq*, London, Collins, 1977, pp. 189–221.
- 56 Alexander Frater, *Chasing the Monsoon*, Harmondsworth, Penguin, 1991, p. 75, and personal observation in December 1999.
- 57 Quoted in R.J. Barendse, *The Arabian Seas*, *1640–1700*, Leiden, Research School, CNWS, Leiden University, 199, p. 56.
- 58 George Windsor Earl, *The Eastern Seas*, or *Voyages and Adventures in the Indian Archipelago in 1832–34*, London, W. H. Allen & Co, 1837, pp.160, 176–7.
- 59 Braudel, *The Mediterranean*, p. 1104.
- 60 George F. Hourani, revised and expanded by John Carswell, *Arab Seafaring in the Indian Ocean in Ancient and Medieval Times*, Princeton, NJ, Princeton University Press, 1951, 1995, pp. 54–5.
- 61 Quoted in William F. Buckley Jr's review of Peter Neill, ed., *American Sea Writing*, in *New York Times Book Review*, 12 March 2000, p. 27.
- 62 A much-quoted statement. It can be found, *inter alia*, in Philip Edwards, *The Story of the Voyage: Sea Narratives in Eighteenth-Century England*, Cambridge, Cambridge University Press, 1994, p. 13.
- 63 Joseph Conrad, Typhoon, and other Tales, New York, New American Library, 1963, p. 219.
- 64 Braudel, The Mediterranean, p. 1241.

3 The beginning of the ocean

- 1 Quoted in Thor Heyerdahl, *The Tigris Expedition: In Search of our Beginnings*, Garden City, Doubleday, 1981, p. 122.
- 2 A.L. Basham, The Wonder that was India, New York, Grove Press, 1954, pp. 241, 302, 319.
- 3 Savitri Chandra, 'Sea and Seafaring as Reflected in Hindi Literary Works during the 15th to 18th Centuries', in K.S. Mathew, ed., *Studies in Maritime History*, Pondicherry, Pondicherry University, 1990, pp. 84–91.
- 4 Neil Philip, *The Illustrated Book of Myths*, *Tales and Legends of the World*, London, Dorling Kindersley, 1995, pp. 108–9.
- 5 See Moti Lal Bhargava, *Indian Ocean Strategies through the Ages*, *with Rare and Antique Maps*, New Delhi, Reliance Publishing House, 1990, pp. 7–25; several articles in S.R. Rao, ed., *Marine Archaeology of Indian Ocean Countries*, Dona Paula, Goa, National Institute of Oceanography, 1988; and I. Kuntara Wiryamartana, 'The "Sea" in Old Javanese Literature', in V.J.H. Houben et al., eds, *Looking in Odd Mirrors: the Java Sea*, Leiden, University of Leiden, 1992, pp. 97–111.
- 6 'The Birth of the Indian Ocean', *Nature*, 337, February 1999, pp. 506–7.
- 7 Miriam Estensen, *Discovery: The Quest for the Great South Land*, Sydney, Allen & Unwin, 1998, pp. 1–4.
- 8 Sydney Morning Herald, 6 May 2000.
- 9 David Christian, "Big History", Globalisation and Australia: Towards a More Inclusive Account of the Past', *Proceedings* of the Australian Academy of the Humanities, 2000, p. 145; P. Bellwood, 'From Bird's Head to Bird's Eye View: Long Term Structures and Trends in Indo-Pacific Prehistory', in J. Miedema, C. Ode and R.A.C. Dam, eds, *Perspectives on the Bird's Head of Irian Jaya*, *Indonesia*, Amsterdam, Rodopi, 1998.
- 10 Moira Tampoe, Maritime Trade between China and the West: An Archaeological Study of the Ceramics from Siraf (Persian Gulf), 8th to 15th centuries AD, Oxford, B.A.R., 1989, p. 1.

- 11 Jacques-Yves Cousteau, *The Living Sea*, New York, Nick Lyons Books, 1963, pp. 179–80.
- 12 Heyerdahl, *Tigris*, passim, and Basil Greenhill, *Archaeology of the Boat: A New Introductory Survey*, London, A & C Black, 1976, pp. 97–9.
- 13 P. David Sentance, 'The Mtepe: The Origins and Longevity of an East African Craft', *Great Circle*, III, 1, 1981, pp. 1–9.
- 14 Sir Thomas Bowrey, *A Geographical Account of Countries Around the Bay of Bengal*, Cambridge, Hakluyt Society, 1905, pp. 42–4.
- 15 Maria Graham, *Journal of a Residence in India*, Edinburgh, A. Constable, 1812, pp. 124, 127.
- 16 Roderich Ptak, ed., J.V.G. Mills trans., *The Overall Survey of the Star Raft by Fei Hsin*, Wiesbaden, Harrassowitz, 1996, p. 57.
- 17 George F. Hourani, revised and expanded by John Carswell, *Arab Seafaring in the Indian Ocean in Ancient and Medieval Times*, Princeton, NJ, Princeton University Press, 1951, 1995, p. 129.
- 18 Jonathan Mark Kenoyer, *Ancient Cities of the Indus Valley Civilization*, Karachi, Oxford University Press, 1998, pp. 96–8; Graham Chandler, 'Traders of the Plain' [Indus Valley], *Aramco World*, September–October, 1999, pp. 35–42.
- 19 Romila Thapar, 'Early Mediterranean Contacts with India: An Overview', in F. De Romanis and A. Tchernia, eds, *Crossings*, New Delhi, Manohar, 1997, p. 12.
- 20 Mark Horton and John Middleton, *The Swahili: The Social Landscape of a Mercantile Society*, Oxford, Blackwell, 2000, pp. 28–30.
- 21 Ibid., p. 9.
- 22 Andre Tchernia, 'Winds and Coins', in De Romanis and Tchernia, eds, *Crossings*, pp. 250–60.
- 23 H.P. Ray, 'Maritime Archaeology of the Indian Ocean: An Overview', in Himanshu Prabha Ray and Jean-Francois Salles, eds, *Tradition and Archeology: Early Maritime Contacts in the Indian Ocean*, New Delhi, Manohar, 1996, p. 2. For an exhaustive study of the date of the Periplus see Christian Robin, 'The Date of the Periplus', in De Romanis and Tchernia, eds, *Crossings*, pp. 41–65.

- Gerard Fussman, 'The Periplus and the Political History of India', in ibid., pp. 66–71 dates it to 40 CE.
- 24 Warmington, quoted in Himanshu Prabha Ray, 'The Western Indian Ocean and the Early Maritime Links of the Indian Subcontinent', *Indian Economic and Social History Review*, 31, 1, 1994, p. 70.
- 25 D.W. MacDowall, 'The Evidence of the Gazetteer of Roman Artefacts in India', in Ray and Salles, eds, *Tradition and Archeology*, p. 79.
- 26 Hourani, Arab Seafaring, pp. 135-6.
- 27 Basham, The Wonder, pp. 226-31.
- 28 S.E. Sidebotham and W.Z.Wendrich, 'Berenike', *Indian Ocean Review*, December 1999, p. 16.
- 29 Ananda Abeydeera, 'The Factual Description of a Sea Route to India and Ceylon by a Greek Master Mariner from Roman Egypt', in *Deutsches Schiffahrtsarchiv*, XIX, 1996, pp. 200, 207.
- 30 See R. Champakalakshmi, *Trade Ideology and Urbanization: South India 300 BC to AD 1300*, New York, Oxford University Press, 1996.
- 31 R.P. Kangle, *The Kautilya Arthasastra*, Bombay, University of Bombay, 3 vols, 1965–72, II, pp. 162–4 for the text, and the gloss in III, p. 179.
- 32 G.W.B. Huntingford, ed., *The Periplus of the Erythraean Sea*, London, Hakluyt, 1980, pp. 37, 103.
- 33 Horton and Middleton, *The Swahili*, p. 31; S. Qudratullah Fatimi, 'In Search Of A Methodology For The History Of Muslim Navigation In The Indian Ocean', *Islamic Quarterly* [Great Britain], 20–2 (1–2), 1978, p. 45.
- 34 A.M. Juma, 'The Swahili and the Mediterranean Worlds: Potteries of the Late Romen Period from Zanzibar', *Antiquity*, 70, 1996, pp. 148–54.
- 35 Valeria Fiorani Piacentini, 'International Indian Ocean Routes and Gwadar Kuh-Batil Settlement in Makran', *Nuova Rivista Storica*, May–August 1988, p. 308 and passim, pp. 307–44; R.A. Donkin, *Beyond Price: Pearls and Pearl Fishing, Origins to the Age of Discovery*, Philadelphia, American Philosophical Society, 1998, p. 95.

36 Hourani, *Arab Seafaring*, pp. 40–9; Philip Snow, *The Star Raft: China's Encounter with Africa*, Ithaca, Cornell University Press, 1989, p. 3; K. Rajan, 'Early Maritime Activities of the Tamils', in Ray and Salles, eds, *Tradition and Archeology*, pp. 97–108.

37 H.P. Ray, *The Winds of Change*: *Buddhism and the Maritime Links of Early South Asia*, Delhi, New York, Oxford University Press, 1994, pp. 190–1; Ian C. Glover, 'The Archaeological Evidence for Early Trade between India and Southeast Asia', in Julian Reade, ed., *Indian Ocean in Antiquity*, London, Kegan Paul, 1996, pp. 365–92. However, see also debunking comments by Monica L. Smith, 'The Dynamic Realm of the Indian Ocean: A Review', *Asian Perspectives*, 36, 2, Fall 1997, pp. 245–59.

38 K.M. Panikkar, *India and the Indian Ocean: An Essay on the Influence of Sea Power on Indian History*, London, G. Allen & Unwin, 1945, p. 29.

39 Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History*, Vol. I, Oxford, Blackwell, 2000, respectively pp. 377, 366.

40 Ibid., p. 158.

- 41 Hourani, *Arab Seafaring*, p. 29; Romila Thapar, 'Early Mediterranean Contacts with India: An Overview', in De Romanis and Tchernia, eds, *Crossings*, p. 33.
- 42 As described in the Asian Studies Association of Australia electronic Newsletter, June, 2001.
- 43 Gunawardana in Satish Chandra, ed., *The Indian Ocean: Explorations in History, Commerce and Politics*, New Delhi, Sage, 1987, pp. 61, 77, and passim for a very useful overview. B. Arunachalam has published extensively on traditional Indian navigation. Useful summaries are 'Traditional Sea and Sky Wisdom of Indian Seamen and their Practical Application', in Ray and Salles, eds, *Tradition and Archeology*, pp. 261–81 and 'Indigenous Traditions of Indian Navigation with Special Reference to South India', in Mathew. ed., *Studies in Maritime History*, pp. 127–42.

44 Lotika Varadarajan, 'Traditions of Indigenous Navigation in Gujarat', *South Asia*, III, 1, 1980, pp. 28–35.

45 See two slightly different translations: Paul Wheatley, *The Golden Khersonese*, Kuala Lumpur, University of Malaya Press, 1961, p. 38, and F. Hirth and W.W. Rockhill, trans. and ed., *Chau Ju*-

kua: His Work on the Chinese and Arab Trade in the Twelth and Thirteenth Centuries, entitled Chufan-chi, St Petersburg, 1911, New York, Paragon Book Reprint Corp, 1965, pp. 27–8.

46 Ian C. Glover, 'The Archaeological Evidence for Early Trade between India and Southeast Asia', in Reade, ed., *Indian Ocean in Antiquity*, pp. 365–92; Ian C. Glover, 'Recent Archaeological Evidence for Early Maritime Contacts between India and Southeast Asia', in Ray and Salles, eds, *Tradition and Archeology*, pp. 129–58. See also the critique by Monica Smith, 'The Dynamic Realm', op. cit.

47 Gunawardana in Chandra, ed., *Indian Ocean*, p. 69.

48 Hermann Kulke, 'Rivalry and Competition in the Bay of Bengal in the Eleventh Century and its Bearing on Indian Ocean Studies', in Om Prakash and Denys Lombard, eds, *Commerce and Culture in the Bay of Bengal*, *1500–1800*, New Delhi, Manohar, 1999, p. 24.

49 Richard Pankhurst, 'Ethiopia across the Red Sea and Indian Ocean', *Africa News Service*, 17 May 1999.

50 Ian Gillman and Hans-Joachim Klimkeit, *Christians in Asia before 1500*, Richmond, Curzon, 1999, p. 11.

51 Hourani, Arab Seafaring, p. 149; for the earlier date Horton and Middleton, The Swahili, p. 27.

52 Julian Reade, 'Evolution in Indian Ocean Studies', in Reade, ed., *Indian Ocean in Antiquity*, p. 20.

53 Bellwood, 'From Bird's Head', op. cit.; Ben Finney, 'The Other One-Third of the Globe', *Journal of World History*, V, 2, 1994, pp. 273–97.

54 Pierre-Yves Manguin, 'Southeast Asian Shipping in the Indian Ocean during the first millenium AD', in Ray and Salles, ed., *Tradition and Archeology*, p. 181 et seq.

55 Roger Blench, 'The Ethnographic Evidence for Long-distance Contacts Between Oceania and East Africa', in Reade, ed., *Indian Ocean in Antiquity*, pp. 417–33.

56 Manguin, op. cit.

57 Mark Horton, "'Mare Nostrum" a new archaeology of the Indian Ocean?' *Antiquity*, 71, 1997, p. 749.

4 Muslims in the Indian Ocean

- 1 Quoted in Lamin Sanneh, 'Time, Space, and Prescriptive Marginality in Muslim Africa: Symbolic Action and Structural Change', in Philip Pomper et al., eds,. *World History: Ideologies, Structure and Identities*, Oxford, Blackwell, 1998, pp. 142–3.
- 2 M. Pickthall, *The Meaning of the Glorious Koran: An Explanatory Translation*, London, A.A. Knopf, 1930, XXX, p. 46; XVII, p. 66; XLV, p. 12.
- 3 Quoted in Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History*, Vol. I, Oxford, Blackwell, 2000, p. 171.
- 4 H.M.J. Maier, 'The Malays and the Sea, the Waves and the Java Sea', in V.J.H. Houben et al., eds, *Looking in Odd Mirrors: The Java Sea*, Leiden, University of Leiden, 1992, p. 4.
- 5 For discussions of different types of dhows, see Edward Prados, 'Indian Ocean Littoral Maritime Evolution: The Case of the Yemeni *huri* and *sanbuq*', *Mariner's Mirror*, 83, 1997, pp. 185–98; Alan Villiers, *Sons of Sinbad*, New York, C. Scribner's Sons, 1940, pp. 337–8.
- 6 Apart from Villiers and Prados cited in the previous note, see works by the following listed in the bibliography: John Jewell, Clifford Hawkins, E.B. and C.P.M. Martin, and Richard LeBaron Bowen's two excellent ethnographic studies.
- 7 Marco Polo, *The Book of Ser Marco Polo*, trans. and ed. Henry Yule and Henri Cordier, London, John Murray, 1921, 2 vols, I, p. 108.
- 8 Muhammad ibn Ahmad Ibn Jubayr, *The Travels of Ibn Jubayr (1183–1185 AC)*, trans. R.J.C. Broadhurst, London, Jonathan Cape,1952, p. 65.
- 9 Pierre-Yves Manguin, 'Late Mediaeval Asian Shipbuilding in the Indian Ocean: A Reappraisal', *Moyen Orient & Océan Indien*, II, 2, 1985, pp. 5–6; Ross Dunn, *The Adventures of Ibn Battuta*, Berkeley, University of California Press, 1986, pp. 110–11; Jeff Harris, 'The Dhow of Racing', *Aramco World*, 50, 3, May/June 1999, pp. 2–11.
- 10 Quoted in Manguin, 'Late Mediaeval Asian Shipbuilding', p. 6.

- 11 Sir John Mandeville, Mandeville's Travels, ed. M. Letts, London, Hakluyt, 1953, p. 118.
- 12 Ibn Battuta, *The Travels of Ibn Battuta*, trans. H.A.R. Gibb, Cambridge, Hakluyt, 1958–94, 4 vols, IV, 827, pp. 797.
- 13 Tim Severin, *The Sinbad Voyage*, London, Hutchinson, 1982, p. 40.
- 14 Sir Thomas Bowrey, *A Geographical Account of Countries Around the Bay of Bengal*, Cambridge, Hakluyt, 1905, pp. 104–5.
- 15 George F. Hourani, revised and expanded by John Carswell, *Arab Seafaring in the Indian Ocean in Ancient and Medieval Times*, Princeton, Princeton University Press, 1951, 1995, pp. 91, 100.
- 16 Hourani, *Arab Seafaring*, pp. 109–10; Harris, op. cit.; G.R. Tibbetts, *Arab Navigation in the Indian Ocean before the Coming of the Portuguese*, London, Royal Asiatic Society of Great Britain and Ireland, 1971, pp. 47–63 for a detailed and technical discussion.
- 17 See a very technical discussion by I.C. Campbell, 'The Lateen Sail in World History', *Journal of World History*, VI, 1995, pp. 1–23.
- 18 John R. Stilgoe, *Alongshore*, New Haven, Yale University Press, 1994, pp. 228–31; Severin, *Sinbad*, p. 132.
- 19 Tibbetts, *Arab Navigation*, pp. 59, 192–5 (the quotation from Ibn Majid is on p. 195); R.B. Serjeant, 'Yemeni Merchants and Trade in Yemen, 13th–16th Centuries', in Denys Lombard and Jean Aubin, eds, *Marchands et hommes d'affairs asiatiques dans l'Océan Indien et la Mer de Chine 13e–20e siècles*, Paris, Editions de l'Ecole des hautes études en sciences sociales, 1988, pp. 61–82.
- 20 O.H.K. Spate, *The Pacific since Magellan*, Canberra, Australian National University Press, 1979–88, 3 vols, I, 40, pp. 242.
- 21 Gaspar Correia, *Lendas da India*, Lisbon, Typ. da Academia real das sciencias, 1858–64, 4 vols, I, p. 787.
- 22 Manguin, 'Late Mediaeval Asian Shipbuilding', pp. 9–12.
- 23 Quoted in Anne Bulley, *The Bombay Country Ships*, 1790–1833, London, Curzon, 2000, p. 27.

- 24 Duarte Barbosa, *Livro*, London, Hakluyt, 1918–21, 2 vols, II, p. 76.
- 25 Quoted in Louise Levathes, *When China Ruled the Seas: The Treasure Fleet of the Dragon Throne*, 1405–33, New York, Oxford University Press, 1994, p. 44.
- 26 Marco Polo, *The Book of Ser Marco Polo*, I, pp. 249–51.
- 27 Ibn Battuta, *The Travels of Ibn Battuta*, IV, pp. 813–4. R. Ptak, 'China and Portugal at Sea: The Early Ming System and the Estado da India Compared', in *Revista de Cultura*, No. 13/14, 1991, p. 24 seems dubious that Chinese ships in the fifteenth century were really over 100 metres long. See also Ma Huan, *The Overall Survey of the Ocean's Shores*, trans. J.V.G. Mills, Cambridge, Hakluyt, 1970, pp. 303–10 and for comprehensive discussions obviously Joseph Needham, *Science and Civilisation in China*, Cambridge, Cambridge University Press, 1954–, especially 1962, IV, part 1, and IV, part 3, and also Gang Deng, *Chinese Maritime Activities and Socioeconomic Development*, *c.* 2100 BC–1900 AD, Westport, Greenwood Press, 1997.
- 28 Manguin, 'Late Mediaeval Asian Shipbuilding', and Manguin, 'The Southeast Asian Ship: An Historical Approach', *Journal of Southeast Asian Studies*, XI, 2, Sept. 1980, pp. 266–76. For sceptical comments see Monica L. Smith, 'The Dynamic Realm of the Indian Ocean: A Review', *Asian perspectives*, 36, Fall 1997, pp. 245–59.
- 29 Ibn Jubayr, *The Travels of Ibn Jubayr*, pp. 65, 69.
- 30 Ibn Majid quoted in Tibbetts, *Arab Navigation*, pp. 197–203.
- 31 Ibid., pp. 218–9.
- 32 G.R. Tibbetts, 'The Role of Charts in Islamic Navigation in the Indian Ocean', in I.B. Harley and David Woodward, eds, *The History of Cartography*, II, book 1, Chicago, University of Chicago Press, 1992, pp. 256–62.
- 33 Ibn Jubayr, *The Travels of Ibn Jubayr*, pp. 66–70
- 34 Alfred Clark, 'Medieval Arab Navigation on the Indian Ocean: Latitude Determination', *Journal of the American Oriental Society*, 113, 1993, pp. 360–74. For Ibn Majid and his work see Tibbetts, *Arab Navigation*, passim, and Ibrahim Khoury, *As-Sufaliyya*, 'The Poem of Sofala,' by Ahmed ibn Magid Translated and Explained, Coimbra, Centro de Estudos da Cartográfia Antiga, 1983.

- 35 Buzurg ibn Shahriyar, *The Book of the Wonders of India*, trans. and ed. G.S.P. Freeman-Grenville, London, East–West Publications, 1981, pp. 27–8, 49–54.
- 36 Paul Wheatley, *The Golden Khersonese*, Kuala Lumpur, University of Malaya Press, 1961, pp. 91–103.
- 37 Ma Huan, *The Overall Survey*, pp. 236–302, especially pp. 253–4.
- 38 See Roderich Ptak, 'Images of Maritime Asia in Two Yuan Texts: *Daoyi zhilue* and *Yiyu zhi'*, in R. Ptak, *China and the Asian Seas: Trade, Travel and Visions of the Other (1400–1750)*, Aldershot, Variorum, 1998, especially p. 55.
- 39 Gari Ledyard, 'Cartography in Korea', *History of Cartography*, II, 2, pp. 243–9.
- 40 John Villiers, 'Ships, Seafaring and the Iconography of Voyages in the Age of Vasco da Gama', in Anthony Disney and Emily Booth, eds, *Vasco da Gama and the Linking of Europe and Asia*, New Delhi, Oxford University Press, 2000, pp. 75–6.
- 41 Levathes, *When China Ruled the Seas*, p. 37; and for Portuguese sources see M.N. Pearson, *Port Cities and Intruders*, Baltimore, Johns Hopkins University Press, 1998, pp. 70–2.
- 42 Piri Reis, *Kitab-i Bahriye* (with an English translation), Ankara, Historical Research Foundation, Istanbul Research Centre, 1988, 4 vols, respectively I, pp. 91–3, 119–53, and 9.
- 43 Ross Dunn, Adventures of Ibn Battuta, Berkeley, University of California Press, 1986.
- 44 Ibn Battuta, *The Travels of Ibn Battuta*, II, pp. 374–82.
- 45 Ibn Battuta, *The Travels of Ibn Battuta* IV, pp. 812–17.
- 46 Richard C. Martin, ed., *Approaches to Islam in Religious Studies*, Tucson, University of Arizona Press, 1985, pp. 94–5.
- 47 David Parkin and Stephen C. Headley, eds, *Islamic Prayer across the Indian Ocean: Inside and Outside the Mosque*, London, Curzon, 2000, p. 3.
- 48 Dunn, Adventures, p. 116.

- 49 Paul Sinclair, 'Archeology in East Africa: An Overview of current Chronological Issues', *Journal of African History*, 32, 1991, p. 181.
- 50 Ibn Shahriyar, *The Book of the Wonders of India*, pp. 10, 31–6, 38, 102, 105.
- 51 al-Biruni, *Alberuni's India*, trans. and ed. Edward Sachau, Delhi, S. Chand, 1964, 2 vols, I, p. 270.
- 52 John Middleton, *The World of the Swahili*, *An African Mercantile Civilisation*, New Haven, Yale University Press, 1982, passim, e.g. p. 37.
- 53 John Sutton, *A Thousand Years of East Africa*, Nairobi, British Institute in Eastern Africa, 1990, pp. 67–8.
- 54 H.T. Wright, 'Trade and Politics on the Eastern Littoral of Africa, AD 800–1300', in Thurstan Shaw et al., eds, *The Archeology of Africa: Food, Metals and Towns*, London, Routledge, 1993, pp. 669–71.
- 55 Correia, *Lendas da India*, I, pp. 75–6.
- 56 Barbosa, *Livro*, II, pp. 74–8.
- 57 The best modern overviews are by Anthony Reid, 'The Islamization of Southeast Asia', in Muhammad Abu Bakar, Amarjit Kaur and Abdullah Zakaria Ghazali, eds, *Historia: Essays in Commemoration of the 25th Anniversary of the Department of History, University of Malaya*, Kuala Lumpur, University of Malaya, 1984, pp. 13–33, which is excellent on disentangling motivations, and M.C. Ricklefs, *A History of Modern Indonesia*, Bloomington, Indiana University Press, 1981, pp. 3–13.
- 58 Randall Pouwels, 'East African Coastal History: Review Article', *Journal of African History*, 40, 1999, pp. 285–96, especially p. 287.
- 59 Horton and Middleton, *The Swahili*, pp. 179 et seq.
- 60 A theme worked out in detail in Parkin and Headley, *Islamic Prayer*, op. cit.
- 61 Dunn, *Adventures of Ibn Battuta*, p. 125.

- 62 Stephen Dale, *Islamic Society on the South Asian Frontier: The Mapillas of Malabar* (1498–1922), Oxford, Clarendon Press, 1980.
- 63 Barbosa, *Livro*, II, pp. 75–6.
- 64 J. Kathirithamby-Wells, 'The Islamic City: Melaka to Jogjakarta, c. 1500–1800', *Modern Asian Studies*, XX, 1986, p. 342 and passim.
- 65 Ibn Battuta, *The Travels of Ibn Battuta*, IV, p. 816; Ibn Jubayr, *The Travels of Ibn Jubayr*, p. 66.
- 66 Ibn Jubayr, The Travels of Ibn Jubayr, p. 65.
- 67 There is a good overview in Roderich Ptak, 'China and the Trade in Cloves, circa 960–1435,' in Roderich Ptak, *China's Seaborne Trade with South and Southeast Asia (1200–1750)*, Aldershot, Ashgate, 1999. Much of this discussion of the spice trade draws on my 'Introduction', *Spices in the Indian Ocean World*, 'An Expanding World, vol. 11', Aldershot, Variorum, 1996, pp. xv-xxxvii.
- 68 Quoted in B. Schrieke, *Indonesian Sociological Studies*, The Hague, W. van Hoeve, 1955, vol. I, p. 18.
- 69 Tomé Pires, *The Suma Oriental of Tomé Pires*, ed. A. Cortesão, London, Hakluyt, 1944, 2 vols, I, pp. 45, 42.
- 70 Marco Polo, *The Book of Ser Marco Polo*, I, pp. 234–5, 390.
- 71 Roderich Ptak, 'Asian Trade in Spices, circa 1500: Quantities and Trade Routes A synopsis of Portuguese and Other Sources', in R. Ptak, *China's Seaborne Trade with South and Southeast Asia* (1200–1750), Aldershot, Ashgate, 1999.
- 72 Marco Polo, *The Book of Ser Marco Polo*, I, pp. 331–2.
- 73 Ibn Battuta, *The Travels of Ibn Battuta*, II, pp. 408–9.
- 74 For the bullion trade see my 'Asia and World Precious Metal Flows in the Early Modern Period', in John McGuire, Patrick Bertola and Peter Reeves, eds, *Evolution of the World Economy, Precious Metals and India*, Delhi, Oxford University Press, 2001, pp. 21–57, and sources there cited.

75 Ibn Battuta, *The Travels of Ibn Battuta*, IV, p. 827. Generally see H.Ulrich Vogel, 'Cowry Trade and its Role in the Economy of Yunnan, the Ninth to the Middle of the Seventeenth Century', in Roderich Ptak and Dietmar Rothermund, eds, *Emporia, Commodities and Entrepreneurs in Asian Maritime Trade, c. 1400–1750*, Stuttgart, Steiner, 1991, pp. 231–62; Jan Hogendorn and Marion Johnson, *The Shell Money of the Slave Trade*, Cambridge, Cambridge University Press,1986; and James Heimann, 'Small Change and Ballast: Cowry Trade and Usage as an Example of Indian Ocean Economic History', *South Asia*, III, 1980, pp. 48–69.

76 Richard Pankhurst, 'Ethiopia across the Red Sea and Indian Ocean', *Africa News Service*, 17 May 1999; Philip Snow, *The Star Raft: China's Encounter with Africa*, Ithaca, Cornell University Press, 1989, pp. 16–20; Anthony Reid, *The Land Below the Winds*, New Haven, Yale University Press, 1988, pp. 129–36.

77 A. Rougeulle, 'Medieval Trade Networks in the Western Indian Ocean (8–14th Cent): Some Reflections from the Distribution Patterns of Chinese Imports in the Islamic World', in Himanshu Prabha Ray and Jean-Francois Salles, eds, *Tradition and Archeology: Early Maritime Contacts in the Indian Ocean*, New Delhi, Manohar, 1996, p. 176 and passim.

78 Barbosa, *Livro*, I, pp. 6–8, 22–3.

79 Ibn Battuta, *The Travels of Ibn Battuta*, II, p. 400.

80 Luis Filipe F.R. Thomaz, 'Malaka et ses communautés marchandes au tournant du 16e siècle', in Lombard and Aubin, eds, *Marchands et hommes d'affairs*, p. 31; Luis Filipe F.R. Thomaz, 'Malacca: The Town and the Society during the First Century of Portuguese Rule', in *Revista de Cultura*, 13/14, 1991, pp. 68–79.

81 R.J. Barendse, 'Trade and State in the Arabian Seas: A Survey from the Fifteenth to the Eighteenth Century', *Journal of World History*, XI, 2000, pp. 173–225.

82 Horton and Middleton, *The Swahili*, p. 76.

83 Snow, *Star Raft*, pp. 1, 24–5; Levathes, *When China Ruled the Sea*, p. 140.

84 G.P.S. Freeman-Grenville, 'A Beach Find in the Northern Territory, Australia', in Victor T. King and A.V.M. Horton, eds, *From Buckfast to Borneo*, Hull, University of Hull, 1995, pp. 536–40.

- 85 Hourani, *Arab Seafaring*, pp. 74–5.
- 86 Barbosa, *Livro*, II, pp. 76–7.
- 87 Ptak, 'Images', especially p. 55.
- 88 Wheatley, *The Golden Khersonese*, p. 75.
- 89 Roderich Ptak, 'China and Calicut in the Early Ming Period: Envoys and Tribute Embassies', in R. Ptak, *China and the Asian Seas: Trade, Travel and Visions of the Other (1400–1750)*, Aldershot, Variorum, 1998.
- 90 Hermann Kulke, 'Rivalry and Competition in the Bay of Bengal in the Eleventh Century and its bearing on Indian Ocean Studies', in Om Prakash and Denys Lombard, eds, *Commerce and Culture in the Bay of Bengal*, *1500–1800*, Delhi, Manohar, 1999, pp. 17–36.
- 91 Marco Polo, *The Book of Ser Marco Polo*, I, pp. 234–5, 390.
- 92 Chen Dasheng and Denys Lombard, 'Le rôle des étrrangers dans le commerce maritime de Quanzhou ('Zaitun') aux 13e et 14e siècles', in Lombard and Aubin, eds, *Marchands et hommes d'affairs*, pp. 21–9.
- 93 Angela Schottenhammer, 'The Maritime Trade of Quanzhou (Zaitun) from the Ninth through the Thirteenth Century', in Himanshu Prabha Ray, ed., *Archaeology of Seafaring: The Indian Ocean in the Ancient Period*, Delhi, Pragati Publications, 1999, pp. 271–90.
- 94 Two slightly different translations of the first quotation in Levathes, *When China Ruled the Sea*, opposite the title page, and in Wheatley, *The Golden Khersonese* p. 89. The second quotation from H.P. Ray, 'An analysis of the Chinese Maritime Voyages into the Indian Ocean during the Early Ming Dynasty and their Raison d'être', *China Reports*, 23,1987, p. 70.
- 95 Mills introduction to Ma Huan, *The Overall Survey*, pp. 2–3.
- 96 Richard Barker, 'The Size of the Treasure Ships and other Chinese Vessels', *Mariner's Mirror*, 75, 1989, pp. 273–5.
- 97 Generally see the several studies by Roderich Ptak cited above, and for a breezy account Levathes. See also Haraprasad Ray, 'An analysis of the Chinese Maritime Voyages', pp. 65–87, which

includes a useful table of the various voyages.

98 Sanneh in Pomper, ed., World History, p. 128.

99 Barbosa, *Livro*, II, pp. 227–9.

100 See G. Rex Smith and Ahmad 'Umar al-Zayla'i, trans. and ed., *Bride of the Red Sea: A 10th/16th century Account of Jeddah*, Durham, Centre for Middle Eastern and Islamic Studies, University of Durham, 1984, for a long and pious account of Jiddah and its association with Mecca, its walls, mosques, etc.

101 João de Barros, *Da Asia*, Lisboa, *Na Regia officina typografica*, 1777–88, II, viii, 1; III, i, 3.

102 Ibid., II, vii, p. 8.

103 Moira Tampoe, *Maritime trade between China and the West: An Archaeological Study of the Ceramics from Siraf (Persian Gulf)*, 8th to 15th centuries A.D., Oxford, British Archaeological Reports, 1989; Hourani, *Arab Seafaring*, p. 69.

104 A. Vallavanthara, *India in 1500 AD: The Narrative of Joseph the Indian*, Mannanam, Research Institute for Studies in History, 1984, pp. 152–5.

105 Quoted in Sanjay Subrahmanyam, *The Political Economy of Commerce: Southern India*, 1500–1650, Cambridge, Cambridge University Press, 1990, p. 7.

106 Pires, *The Suma Oriental*, I, pp. 41–2.

107 Horton and Middleton, *The Swahili*, p. 89; M.N. Pearson, *Port Cities and Intruders*, pp. 101–28.

108 Tampoe, Maritime Trade, p. 105.

109 Amitav Ghosh, *In an Antique Land: History in the Guise of a Traveler's Tale*, New York, Vintage Books, 1993, pp. 257–8.

110 Bhaswati Bhattacharya, 'The Chulia Merchants of Southern Coromandel in the Eighteenth Century: A Case for Continuity', in Prakash and Lombard, eds, *Commerce and Culture*, pp. 285–306; Barbara Watson Andaya, 'The Indian Saudagar Raja (the King's Merchant) in Traditional Malay Courts', *Journal of the Malaysian Branch of the Royal Asiatic Society*, LI, 1978, pp. 13–35.

111 Ibn Battuta, *The Travels of Ibn Battuta*, II, pp. 374.

112 Ibid., II, pp. 383-4.

113 Ibid., IV, p. 826.

114 Haraprasad Ray, 'Historical Contacts between Quilon and China', in Pius Malekandathil and Jamal Mohammed, eds, *The Portuguese*, *Indian Ocean and European Bridgeheads 1500–1800: Festschrift in Honour of Prof. K.S. Mathew*, Tellicherry, Kerala, Institute for Research in Social Sciences and Humanities of MESHAR, 2001, p. 392.

115 Marco Polo, *The Book of Ser Marco Polo*, I, pp. 363, 367–8. The editors comment that this is quite true, and one could string together many accounts of the probity of Indian merchants over many centuries.

116 Vincent Le Blanc, *The World Surveyed*, London, printed for J. Starkey, 1660, p. 47. See also a long and very valuable account by Cesare Federici in Richard Hakluyt, *The Principal Navigations*, Glasgow, J. MacLehose, 1903, 12 vols, V, pp. 375–6.

117 Pires, The Suma Oriental, II, 273-4.

118 Barbosa, *Livro*, II, p. 77.

119 Ma Huan, *The Overall Survey*, pp. 140–3; the quotation is on p. 143.

120 Tampoe, Maritime Trade, p. 129; Buzurg ibn Shahriyar, The Book of Wonders, pp. 62-4.

121 Philip Curtin, *Cross-Cultural Trade in World History*, Cambridge, Cambridge University Press, 1984.

122 See the following excellent study, which puts forward 'circulation' as being characteristic of Indian merchants, as compared with their being a version of a diaspora: Claude Markovits, *The Global World of Indian Merchants*, Cambridge, Cambridge University Press, 2000.

123 Barendse, 'Trade and State', pp. 186–8.

124 For European parallels see Michel Mollat du Jourdin, *Europe and the Sea*, Oxford, Blackwell, 1993, pp. 99–100.

125 See the exemplary study: Luis Filipe F.R. Thomaz, 'Malaka et ses communautés marchandes au tournant du 16e siècle', in Lombard and Aubin, eds, *Merchands et hommes d'affairs*, pp. 31–48.

126 Barbosa, *Livro*, II, p. 76.

127 Andaya, 'Saudagar Raja', passim.

128 For general discussion see Sanjay Subrahmanyam, "Persianization" and "Mercantialism": Two themes in Bay of Bengal History, 1400–1700', in Prakash and Lombard, eds, *Commerce and Culture in the Bay of Bengal*, pp. 47–85.

129 Numerous studies by Anthony Reid, such as 'An "Age of Commerce" in SE Asian History', *Modern Asian Studies*, 24, 1990, 1–30; J. Kathirithamby-Wells, 'Introduction', in J. Kathirithamby-Wells and John Villiers, eds, *The Southeast Asian Port and Polity*, Singapore, Singapore University Press, 1990, pp. 2–3.

130 Arun Das Gupta, 'The Maritime Trade of Indonesia, 1500–1800', in Ashin Das Gupta and M.N. Pearson, eds, *India and the Indian Ocean*, Calcutta, Oxford University Press, 1987, pp. 240–75; for a contrary view, Christopher Wake, 'Banten around the Turn of the Sixteenth Century: Trade and Society in an Indonesian Port City', in Frank Broeze, ed., *Gateways of Asia: Port Cities of Asia from the 13th to the 20th Centuries*, London, Kegan Paul International, 1997, pp. 66–108.

131 J. Kathirithamby-Wells, 'Introduction', passim.

132 Powys Mathers, and J.C. Mardrus, trans., *The Book of the Thousand Nights and One Night*, London, Routledge, 7th impression, 1949, vol. II, pp. 287–9.

133 Ibid., pp. 250, 261, 303–4. Sindbad made seven voyages, and these make up part of the very large compilation called *The Book of the Thousand Nights and One Night*.

134 Ghosh, Antique Land, pp. 157–8.

135 Tampoe, Maritime Trade, p. 126.

136 R.B. Serjeant, 'Yemeni Merchants and Trade in Yemen, 13th-16th Centuries', in Lombard and Aubin, eds, *Marchands et hommes d'affairs*, p. 69.

- 137 S.D. Goitein, 'From the Mediterranean to India: Documents on the trade to India, South Arabia and East Africa, from the Eleventh and Twelfth centuries', *Speculum*, 29, 1954, pp. 191–5.
- 138 S.D. Goitein, 'Portrait of a Medieval India Trader: Three Letters from the Cairo Geniza', *Bulletin of the School of Oriental and African Studies*, L, 1987, pp. 449–64.
- 139 One influential book was Theda Skocpol, ed., *Bringing the State back In*, Cambridge, Cambridge University Press, 1985.
- 140 Ibn Battuta, *The Travels of Ibn Battuta*, IV, p. 865.
- 141 Marco Polo, The Book of Ser Marco Polo, II, pp. 389, 392.
- 142 Ibn Battuta, The Travels of Ibn Battuta, IV, p. 800.
- 143 Roderich Ptak, ed., J.V.G. Mills, trans., *The Overall Survey of the Star Raft by Fei Hsin*, Wiesbaden, Harrassowitz, 1996, p. 86.
- 144 Tibbetts, Arab Navigation, p. 202.
- 145 Ghosh, Antique Land, pp. 257–8.
- 146 Craig T. Palmer, 'The Ritual Taboos of Fishermen: An Alternative Explanation', *MAST*, II, 1989, pp. 59–68.
- 147 Ibn Battuta, *The Travels of Ibn Battuta*, IV, pp. 911–12.
- 148 F. Hirth and W.W. Rockhill, trans. and ed., *Chau Ju-kua: His Work on the Chinese and Arab Trade in the Twelth and Thirteenth Centuries*, *Entitled Chu-fan-chi*, St Petersburg, 1911 [New York, Paragon Book Reprint Corp], p. 111 and f.n. 2.
- 149 Ibn Battuta, *The Travels of Ibn Battuta*, I, pp. 25–7; for other prayers see Tibbetts, *Arab Navigation*, pp. 193–4.
- 150 Subrahmanyam in Prakash and Lombard, eds, *Commerce and Culture*, p. 60; John O'Kane, trans. and ed., *The Ship of Sulaiman*, London, Routledge & Kegan Paul, 1972, p. 26.
- 151 Ibn Battuta, *The Travels of Ibn Battuta*, III, p. 393.

152 Abd-er-Razzak in R.H. Major, ed., *India in the Fifteenth Century*, London, Hakluyt, 1857, pp. 45–9.

153 Mathers and Mardrus, trans., *Thousand Nights*, pp. 260–1, 305.

154 Ibn Jubayr, India in the Fifteenth Century, pp. 66–70.

155 Abd-er-Razzak in Major, The Travels of Ibn Battuta, pp. 4, 7–8, 12–13.

156 Ibn Battuta, *The Travels of Ibn Battuta*, III, pp. 361, 393.

157 Ibid., pp. III, pp. 600–2.

158 Ibid., IV, p. 857.

159 Ibid., IV, p. 814.

160 Dunn, Adventures of Ibn Battuta, p. 247.

161 Ibn Battuta, The Travels of Ibn Battuta, IV, p. 826.

162 Abdul Sheriff, "Brotherhood of the Sea", in Rosa Maria Perez, ed., *Cultures of the Indian Ocean*, Lisbon, CNCDP, 1998.

5 Europeans in an Indian Ocean world

- 1 K.M. Panikkar, *India and the Indian Ocean: An Essay on the Influence of Sea Power on Indian History*, London, Allen & Unwin, 1945, p. 38.
- 2 Andrew C. Hess, 'The Evolution of the Ottoman Seaborne Empire in the Age of Oceanic Discoveries, 1453–1525', *American Historical Review*, LXXV, 1970, pp. 1892–919.
- 3 Dr John Fryer, *A New Account of East India and Persia*, London, Hakluyt, 1909–15, 3 vols, I, p. 302.
- 4 Jahangir, Tuzuk-i Jahangiri, London, Royal Asiatic Society, 1909–14, 2 vols, I, pp. 4 16–19.

- 5 R.J. Barendse, 'Trade and State in the Arabian Seas: A Survey from the Fifteenth to the Eighteenth Century', *Journal of World History*, XI, 2000, pp. 212–14.
- 6 See for an overview and more sources Om Prakash, *Asia and the Pre-Modern World Economy*, Leiden, University of Leiden, 1995; Om Prakash, *The Dutch East India Company and the Economy of Bengal*, 1630–1720, Princeton, Princeton University Press, 1985, p. 5; H.W. Van Santen, *De Verenigde Oost-Indische Compagnie in Gujarat en Hindustan*, 1620–1660, University of Leiden, Ph.D. thesis, 1982, pp. 206–12.
- 7 S.N.Banhatti, ed., *Ajnapatra*, Nagpur and Pune, Suvichar Prakashan Mandal, 4th edn. 1961, repr. 1986, pp. 89, 90–1.
- 8 See especially Ashin Das Gupta, 'Trade and Politics in 18th-century India', in D.S. Richards, ed., *Islam and the Trade of Asia*, Oxford, Cassirer, pp. 181–214.
- 9 Quoted in Basil Davidson, *The Search for Africa: A History in the Making*, London, James Currey, 1994, p. 12; Chandra Richard de Silva, 'Islands and Beaches: Indigenous Relations with the Portuguese in Sri Lanka after Vasco da Gama', in Anthony Disney and Emily Booth, eds, *Vasco da Gama and the Linking of Europe and Asia*, New Delhi, Oxford University Press, 2000, p. 283.
- 10 K.C. Fok, 'Early Ming Images of the Portuguese', in Roderich Ptak, ed., *Portuguese Asia*, Stuttgart, Steiner, 1987, p. 145.
- 11 Jacques Le Goff, 'The Medieval West and the Indian Ocean: An Oneiric Horizon', in his *Time*, *Work and Culture in the Middle Ages*, Chicago, University of Chicago Press, 1982, pp. 189–200, e.g. 195.
- 12 Sir John Mandeville, *Mandeville's Travels*, ed. M. Letts, London, Hakluyt, 1953, pp. 116–26; the quotation is on p. 117.
- 13 Sanjay Subrahmanyam and L.F. Thomaz, 'Evolution of Empire: The Portuguese in the Indian Ocean in the Sixteenth Century', in James Tracy, ed., *The Political Economy of Merchant Empires*, New York, Cambridge University Press, 1991, p. 304.
- 14 For these estimates see my *Merchants and Rulers in Gujarat*, Berkeley, University of California Press, 1976, and *Coastal Western India*, New Delhi, Concept, 1981. Much of my discussion of the Portuguese in this chapter draws on parts of these books, and on my *The Portuguese in India*,

Cambridge, Cambridge University Press, 1987. I have also of course taken account of a host of new publications which have appeared since these early efforts of mine.

15 João de Barros, *Da Asia*, Lisboa, Na Regia officina typografica, 1777–88, I, vi, l.

16 Michel Mollat du Jourdin, *Europe and the Sea*, Oxford, Blackwell, 1993, pp. 28–31.

17 M. Tull, 'Maritime History in Australia', in Frank Broeze, ed., *Maritime History at the Crossroads: A Critical Review of Recent Historiography*, St John's, Canada, International Maritime Economic History Association, 1996, pp. 7–8; Mark Vink, 'Mare Liberum and Dominium Maris: Legal Arguments and Implications of the Luso–Dutch Struggle for control over Asian Waters, c. 1600–1663', in K.S. Mathew, ed., *Studies in Maritime History*, Pondicherry, Pondicherry University, 1990, p. 48.

18 L.F. Thomaz, 'Portuguese Control over the Arabian Sea and the Bay of Bengal: A Comparative Study', in Om Prakash and Denys Lombard, eds, *Commerce and Culture in the Bay of Bengal*, 1500–1800, Delhi, Manohar, 1999, pp. 117, 141, 158. See also Luis Filipe F.R. Thomaz, 'Precedents and Parallels of the Portuguese Cartaz System', in Pius Malekandethil and T. Jamal Mohammed, eds, *The Portuguese, Indian Ocean and European Bridgeheads* 1500–1800: Festschrift in Honour of Prof. K.S. Mathew, Tellicherry, Kerala, Institute for Research in Social Sciences and Humanities of MESHAR, 2001, pp. 67–85 for a rather unconvincing attempt to find precedents for the Portuguese system.

19 See respectively my *Coastal Western India*, New Delhi, 1981, p. 27; and B. Schrieke, 'The Shifts in Political and Economic Power in the Indonesian Archipelago in the Sixteenth and Seventeenth Century', in *Indonesian Sociological Studies*, The Hague, W. van Hoeve, 1955, vol. I, pp. 26, 70.

20 Dr M.A. Muid Khan, 'Indo-Portuguese Struggle for Maritime Supremacy (As gleaned from an Unpublished Arabic *Urjuza: Fathul Mubiyn*)', in P.M. Joshi and M.A. Nayeem, eds, *Studies in the Foreign Relations of India (From Earliest Times to 1947) Prof. H.K. Sherwani Felicitation Volume*, Hyderabad, State Archives, Government of Andhra Pradesh, 1975, pp. 165–83.

21 Zain-ud-din, *Tohfut-ul-Mujahideen*, trans. M.J. Rowlandson, London, Oriental Translation Fund of Great Britain and Ireland, 1833, p. 107.

22 Richard Hall, *Empires of the Monsoon: A History of the Indian Ocean and its Invaders*, London, HarperCollins, 1996, p. 120.

- 23 Bailey Diffie and George Winius, *Foundations of the Portuguese Empire*, *1415–1580*, Minneapolis, University of Minnesota Press, 1977, pp. 224–5.
- 24 Thomaz, 'Portuguese control over the Arabian Sea', pp. 122–4, 158.
- 25 See Sanjay Subrahmanyam, *The Portuguese Empire in Asia 1500–1700: A Political and Economic History*, London, Longman, 1993, pp. 249–61 and other works cited there for a full discussion.
- 26 Lakshmi Subramanian, 'Of Pirates and Potentates: Maritime Jurisdiction and the Construction of Piracy in the Indian Ocean', in Devleena Ghosh and Stephen Muecke, eds, *The UTS Review: Cultural Studies and New Writing*, VI, 2, November 2000, 'The Indian Ocean', p. 21.
- 27 David Mitchell, *Pirates*, London, Thames and Hudson, 1976, p. 101.
- 28 Barendse, 'Trade and State', p. 191, f.n. 71. See four recent studies on this topic: Roderich Ptak, 'Piracy along the Coasts of Southwest India and Ming China', in Artur Teodoro de Matos and Luís Filipe F. Reis Thomaz, eds, *As relações entre a India Portuguesa*, *a Asia do Sueste e o Extremo Oriente* (actas do VI Seminário Internacional de História Indo-Portuguesa), Macau, no publisher, 1993, pp. 255–73; in the same publication Luis Filipe F.R. Thomaz, 'Do Cabo Espichel a Macau: Vicissitudes do corso Português', pp. 537–68; Patricia Risso, 'Cross-Cultural Perceptions of Piracy: Maritime Violence in the Western Indian Ocean and Persian Gulf Region during the long Eighteenth Century', *Journal of World History*, XII, 2001, pp. 293–319, and J.L. Anderson, 'Pirates and World History: An Economic Perspective', *Journal of World History*, VI, 1995, 175–199.
- 29 Mitchell, *Pirates*, p. 89.
- 30 Sir Thomas Bowrey, *A Geographical Account of Countries Around the Bay of Bengal*, Cambridge, Hakluyt, 1905, p. 262.
- 31 Mitchell, *Pirates*, pp. 107–8.
- 32 For all this section on the spice trade see my 'Introduction', in *Spices in the Indian Ocean World*, 'An Expanding World, vol. 11' Aldershot, Variorum, 1996, pp. xv-xxxvii, and the sources there cited.
- 33 Vitorino Magalhães Godinho, *Mito e mercadoria*, *utopia e prática de navegar*, *séculos XIII-XVIII*, Lisbon, Difusão Editorial, 1990, p. 331.

- 34 Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, London, Collins, 1972, 2 vols, I, p. 549.
- 35 Generally for the Portuguese in East Africa see M.N. Pearson, *Port Cities and Intruders*, Baltimore, The Johns Hopkins University Press, 1998, pp. 129–54.
- 36 Pius Malekandathil, The Germans, the Portuguese and India, Munster, LIT, 1999, p. 100.
- 37 A.J.R. Russell-Wood, *A World on the Move: The Portuguese in Africa, Asia, and America, 1415–1808*, St Martin's Press, New York, 1992, p. 64, and many other examples on pp. 63–122.
- 38 T. Bentley Duncan, 'Navigation between Portugal and Asia in the Sixteenth and Seventeenth Centuries', in Cyriac K. Pullapilly, et al., eds, *Asia and the West: Encounters and Exchanges from the Age of Explorations: Essays in Honor of Donald F. Lach*, Notre Dame, Ind., Cross Roads Books, 1986.
- 39 João dos Santos, *Ethiopia Oriental*, Lisbon, Escriptorio da Empreza, 1891, 2 vols, I, pp. i, 17.
- 40 Diogo do Couto, *Da Asia*, Lisboa, Na Regia officina typografica, 1777–88, IX, cap. 22.
- 41 See C.R. Boxer, *From Lisbon to Goa*, *1500–1750: Studies in Portuguese Maritime Enterprise*, Aldershot, Variorum, 1984, especially 'The Principal Ports of Call in the "Carreira da India",' and 'Moçambique Island and the "Carreira da India", for copious detail on the Portuguese in Mozambique, their forts and their illnesses.
- 42 Fernão Lopes de Castanheda, *História do descobrimento e conquista da India pelos Portugueses*, 3rd ed., Coímbra, Impr. da Universidade, 1924–33, 9 vols, VII, pp. 87–8.
- 43 Generally for 'corruption' see my *Coastal Western India*, pp. 18–25.
- 44 De Barros Da Asia, I, iv, 3.
- 45 Gaspar Correia, *Lendas da India*, Lisbon, Typ. da Academia real das Sciencias, 1858–64, 4 vols, I, p. 273.
- 46 Vitorino Magalhães Godinho, *Os descobrimentos e a economia mundial*, 2nd ed., Lisbon, Editorial Presença, 1981–83, 4 vols, I, pp. 192–4.

- 47 Correia, *Lendas da India*, I, pp. 537–44.
- 48 Sanjay Subrahmanyam, 'Notes on the Political Economy of Portuguese Asia, 1523–1526', in Teotonio R. de Souza, ed., *Vasco da Gama and India, International Conference*, Lisbon, Fundação Calouste Gulbenkian, 1999, 3 vols, II, pp. 47–65.
- 49 The activities of the northern European trading companies have been splendidly covered in two books, the first a classic, the second the best modern survey: Holden Furber, *Rival Empires of Trade in the Orient*, *1600–1800*, Minneapolis, University of Minnesota Press, 1976; Om Prakash, *European Commercial Enterprise in Pre-Colonial India*, Cambridge, Cambridge University Press, 1998. Details on all the matters sketched here will be found in these books.
- 50 Quoted in Devleena Ghosh and Stephen Muecke, 'Indian Ocean Stories', *UTS Review*, 'The Indian Ocean', ed. Ghosh and Muecke, VI, 2, November 2000, p. 28.
- 51 Samuel Pepys' Diary, quoted in Gillian Tindall, *City of Gold: The Biography of Bombay*, Harmondsworth, Penguin, 1992, p. v.
- 52 Denys Lombard, 'Questions on the Contact between European Companies and Asian Societies', in L. Blussé and F. Gaastra, eds, *Companies and Trade*, Leiden, Leiden University Press, 1981, p. 187.
- 53 Again, data on the spice trade is mostly from my 'Introduction' to *Spices in the Indian Ocean World*.
- 54 Excellent data in Anthony Reid, 'An "Age of Commerce" in SE Asian History', *Modern Asian Studies*, 24, 1990, pp. 1–30, especially p. 11.
- 55 Willard A. Hanna, *Indonesian Banda: Colonialism and its Aftermath in the Nutmeg Islands*, Philadelphia, Institute for the Study of Human Issues, 1978, p. 63, and generally for the Dutch in the Bandas.
- 56 Kristof Glamman, *Dutch–Asiatic Trade*, *1620–1740*, Copenhagen, Danish Scientific Press, 1958, p. 109.
- 57 Mark Vink, 'The Dutch East India Company and the Pepper Trade between Kerala and Tamilnad, 1663–1795: A Geo-Historical Analysis', in K.S. Mathew, ed., *Mariners, Merchants and Oceans: Studies in Maritime History*, New Delhi, Manohar, 1995, pp. 274–6.

- 58 Els M. Jacobs, *In Pursuit of Pepper and Tea: The Story of the Dutch East India Company*, Amsterdam, Netherlands Maritime Museum, 1991, p. 77.
- 59 J. Kathirithamby-Wells, 'Introduction', in J. Kathirithamby-Wells and John Villiers, eds, *The Southeast Asian Port and Polity*, Singapore, Singapore University Press, 1990.
- 60 Om Prakash, European Commercial Enterprise.
- 61 Quoted in Niels Steensgaard, *The Asian Trade Revolution of the Seventeenth Century: The East India Companies and the Decline of the Caravan Trade*, Chicago, University of Chicago Press, 1974, p. 407.
- 62 R. Raben, 'European Periphery at the Heart of the Ocean: The Maldives, 17th–18th Centuries', in J. Everaert and J. Parmentier, eds, *International Conference on Shipping, Factories and Colonization (Brussels, 24–26 November 1994*), Brussels, Koninklijke Academie van Belgie, 1996.
- 63 Furber, *Rival Empires*, p. 231.
- 64 Prakash's numerous articles on this and related topics have been conveniently collected in *Precious Metals and Commerce: The Dutch East India Company in the Indian Ocean Trade*, Aldershot, Variorum, 1994.
- 65 S. Arasaratnam, 'Slave Trade in the Indian Ocean in the Seventeenth Century', in K.S. Mathew, ed., *Mariners, Merchants and Oceans*, pp. 195–208.
- 66 Rajat Datta, 'Markets, Bullion and Bengal's Commercial Economy: An Eighteenth Century Perspective', in Prakash and Lombard, eds, *Commerce and Culture in the Bay of Bengal*, p. 331.
- 67 Niels Steensgaard, 'The Indian Ocean Network and the Emerging World-Economy, c. 1500–1750', in Satish Chandra, ed., *The Indian Ocean: Explorations in History, Commerce and Politics*, New Delhi, Sage, 1987, pp. 125–50.
- 68 Ashin Das Gupta, 'India and the Indian Ocean in the Eighteenth Century', in Ashin Das Gupta and M.N. Pearson, eds, *India and the Indian Ocean*, *1500–1800*, Calcutta, 1987, New Delhi, 1999, pp. 131–61, especially p. 134.

69 For this data on the Portuguese in East Africa see my *Port Cities and Intruders*, pp. 129–54, and the sources there cited.

70 See again *Port Cities and Intruders*, pp. 129–54, and my 'The Search for the Similar: Early Contacts between Portuguese and Indians', in Jens Christian V. Johansen, Erling Ladewig Petersen and Henrik Stevnsborg, eds, *Clashes of Cultures: Essays in Honour of Niels Steensgaard*, Odense, Odense University Press, 1992, pp. 144–59.

71 See my 'First Contacts between Indian and European Medical Systems: Goa in the Sixteenth Century', in David Arnold ed., *Warm Climates and Western Medicine: The Emergence of Tropical Medicine*, *1500–1900*, Amsterdam, Editions Rodopi (The Wellcome Institute Series in the History of Medicine), 1996, pp. 20–41, and my 'Hindu Medical Practice in Sixteenth-Century Western India: Evidence from the Portuguese Records', *Portuguese Studies*, XVII, 2001, pp. 100–13 for this section, and the quotations in it.

72 Georg Schurhammer, *Francis Xavier: His Life, His Times, India*, Rome, Jesuit Historical Institute, 1977, vol. II, p. 96.

73 Mrs Jemima Kindersley, *Letters from the Island of Teneriffe*, *Brazil*, *The Cape of Good Hope*, *and the East Indies*, London, J. Nourse, 1777, pp. 66–7, 169.

74 Leonard Blussé, *Strange company: Chinese settlers*, *Mestizo Women*, *and the Dutch in VOC Batavia*, Dordrecht and Riverton, Foris Publications, 1986.

75 G.V. Scammell, 'European Exiles, Renegades and Outlaws and the Maritime Economy of Asia, c. 1500–1750', in K.S. Mathew, ed., *Mariners, Merchants and Oceans*, p. 123.

76 John O'Kane, trans. and ed., *The Ship of Sulaiman*, London, Routledge & Kegan Paul, 1972, pp. 37–40.

6 The early modern Indian Ocean world

1 Quoted in R.J. Barendse, *The Arabian Seas*, *1640–1700*, Leiden, Research School, CNWS, Leiden University, 1998, p. 157.

- 2 Quoted in Gillian Tindall, *City of Gold: The Biography of Bombay*, Harmondsworth, Penguin, 1992, p. 102.
- 3 John Correia-Afonso, ed., *Intrepid Itinerant: Manuel Godinho and his Journey from India to Portugal in 1663*, Bombay, Oxford University Press, 1990, pp. 47–9.
- 4 Sir James Lancaster, *The Voyage of Sir James Lancaster to Brazil and the East Indies*, *1591–1603*, ed. W. Foster, London, Hakluyt, 1940, pp. 3, 6.
- 5 John O'Kane, trans. and ed., *The Ship of Sulaiman*, London, Routledge & Kegan Paul, 1972, pp. 181, 171.
- 6 Luis Filipe F.R. Thomaz, 'Malaka et ses communautés marchandes au tournant du 16e siècle', in Denys Lombard and Jean Aubin, eds, *Marchands et hommes d'affairs asiatiques dans l'Océan Indien et la Mer de Chine 13e-20e siècles*, Paris, Editions de l'Ecole des hautes études en sciences sociales, 1988, p. 42.
- 7 Quoted in M.N. Pearson, *Pious Passengers: The Hajj in Earlier Times*, New Delhi, Sterling, 1994, p. 71.
- 8 Indrani Ray, *The French East India Company and the Trade of the Indian Ocean: A Collection of Essays*, ed. Lakshmi Subramanian, Delhi, Oxford University Press, 1999, pp. 177–200.
- 9 R.J. Barendse, 'Trade and State in the Arabian Seas: A Survey from the Fifteenth to the Eighteenth Century', *Journal of World History*, XI, 2000, pp. 206–7.
- 10 O'Kane, trans. and ed., *Sulaiman*, p. 168. See also Correia-Afonso, ed., *Godinho*, pp. 117–19 for a detailed description by one who had been to both Mannar and Bahrain.
- 11 Sir Thomas Bowrey, *A Geographical Account of Countries Around the Bay of Bengal*, Cambridge, Hakluyt, 1905, pp. 73–6.
- 12 Jerónimo Lobo, *The Itinerary of Jerónimo Lobo*, trans. Donald M. Lockhart, London, Hakluyt, 1984, pp. 89–90.
- 13 Ashin Das Gupta, 'Gujarati Merchants and the Red Sea Trade, 1700–1725', reprinted in Uma Das Gupta, ed., *The World of the Indian Ocean Merchant, 1500–1800: Collected Essays of Ashin Das*

- *Gupta*, New Delhi, Oxford University Press, 2001, pp. 369–70.
- 14 See Levon Khatchikian, 'The Ledger of the Merchant Hovhannes Joughayetsi', in Sanjay Subrahmanyam, ed., *Merchant Networks in the Early Modern World*, Aldershot, Variorum, 1996, pp. 125–58.
- 15 Barendse, 'Trade and State,' p. 225; Michel Aghassian and Keram Kevonian, 'Le commerce arménien dans l'Océan Indien aux 17e et 18e siêcles', in Lombard and Aubin, eds, *Marchands et hommes d'affairs*, pp. 155–81.
- 16 S. Arasaratnam, 'Merchants, Commerce and the State in South India, 1650–1700', in *Revista de Cultura* [Macau], nos. 13/14, 1991, p. 158.
- 17 Bowrey, *A Geographical Account*, pp. 257–8. On this community see Sinnappah Arasaratnam, 'The Chulia Muslim Merchants in Southeast Asia, 1650–1800', reprinted in Subrahmanyam, ed., *Merchant Networks*.
- 18 Stephen Frederic Dale, *Indian Merchants and Eurasian Trade*, 1600–1750, Cambridge, Cambridge University Press, 1994.
- 19 Dennis O. Flynn, 'Comparing the Tokagawa Shogunate with Hapsburg Spain: Two Silver-based Empires in a Global Setting', in James D. Tracy, ed., *The Political Economy of Merchant Empires: State Power and World Trade*, *1350–1750*, New York, Cambridge University Press, 1991, p. 336.
- 20 Dennis O. Flynn and Arturo Giráldez, 'Born with a "Silver Spoon": The Origin of World Trade in 1571', *Journal of World History*, VI, 1995, p. 203. They seem to be unaware that Europe always retained more precious metals than it exported.
- 21 For an overview of the bullion trade in the Indian Ocean in the early modern period see M.N. Pearson, 'Asia and World Precious Metal Flows in the Early Modern Period', in John McGuire, Patrick Bertola and Peter Reeves, eds, *Evolution of the World Economy, Precious Metals and India*, Delhi, Oxford University Press, 2001, pp. 21–57.
- 22 M.D.D. Newitt, *A History of Mozambique*, 1994, London, Hurst, p. 127; John Middleton, *The World of the Swahili*, *An African Mercantile Civilisation*, New Haven, Yale University Press, 1992, p. 202, f.n. 8.

- 23 A.J.R. Russell-Wood, *A World on the Move: The Portuguese in Africa, Asia, and America, 1415–1808*, New York, St Martin's Press, 1992, pp. 159, 168–74; and by the same author 'A Brazilian Commercial Presence beyond the Cape of Good Hope, 16th-19th Centuries', in Pius Malekandathil and Jamal Mohammed, eds, *The Portuguese, Indian Ocean and European Bridgeheads 1500–1800: Festschrift in Honour of Prof. K.S. Mathew*, Tellicherry, Kerala, Institute for Research in Social Sciences and Humanities of MESHAR, 2001, p. 205.
- 24 Russell-Wood, 'Brazilian Commercial Presence', p. 194.
- 25 Niels Steensgaard, 'Asian Trade 15th-18th Centuries: Continuity and Discontinuities', in *Fifteenth International Congress of Historical Sciences*, *Proceedings*, Bucharest, ICHS, 1980, II, p. 497.
- 26 Ludovico di Varthema, *The Itinerary of Ludovico di Varthema of Bologna from 1502 to 1508*, ed. R.C. Temple, London, The Argonaut Press, 1928, p. 63. See also Ann G. Carmichael, 'Syphilis and the Columbian Exchange: Was the New Disease really New?', in Mario Gomes Marques and John Cule, eds, *The Great Maritime Discoveries and World Health*, Lisbon, Escola Nacional de Saúde Pública, Ordem dos Médicos, Instituto de Sintra, 1991, pp. 187–200.
- 27 Osamu Kondo, 'Japan and the Indian Ocean at the Time of the Mughal Empire, with Special Reference to Gujarat', in Satish Chandra, ed., *The Indian Ocean*, New Delhi, Sage, 1987, p. 175.
- 28 Catherine Raymond, 'Religious and Scholarly Exchanges between the Singhalese Sangha and the Arakanese and Burmese Theravadin Communities: Historical Documentation and Physical Evidence', in Om Prakash and Denys Lombard, eds, *Commerce and Culture in the Bay of Bengal*, 1500–1800, Delhi, Manohar, 1999, pp. 87–114.
- 29 See on the hajj my *Pious Passengers*, passim.
- 30 J. Kathirithamby-Wells, 'The Islamic City: Melaka to Jogjakarta, c. 1500–1800', *Modern Asian Studies*, XX, 1986, pp. 343–4.
- 31 Lobo, *Itinerary*, pp. 286–7.
- 32 Albert Gray, trans. and ed., *The Voyage of François Pyrard of Laval to the East Indies, the Maldives, the Moluccas and Brazil*, London, Hakluyt, 1887–90, 2 vols, I, pp. 110, 165. For the following section and the quotations in it see my *Port Cities and Intruders: The Swahili Coast, India*,

- and Portugal in the Early Modern Era, Baltimore, The Johns Hopkins University Press, chapter 5, and *The Portuguese in India*, Cambridge, Cambridge University Press, 1987, chapter 5.
- 33 Robert C.-H. Shell, 'Islam in Southern Africa, 1652–1998', in Nehemia Levtzion and Randall L. Pouwels, eds, *The History of Islam in Africa*, Athens, Ohio University Press, 2000, p. 328.
- 34 Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History*, vol. I, Oxford, Blackwell, 2000, pp. 444, 406.
- 35 See Artur Teodoro de Matos, "'Quem vai ao mar em terra se avia." Preparativos e recomendações aos passageiros da Carreira de India no seculo XVII', in Artur Teodoro de Matos and Luís Filipe F. Reis Thomaz, eds, *A carreira da India e as rotas dos estreitos* (actas do VIII Seminario Internacional de História Indo-Portuguesa), Angra do Heroísmo, Secretaria Regional Assuntos Culturais, 1998, pp. 377–94.
- 36 A.R. Disney, 'Getting to the China Mission in the Early Seventeenth Century', in Artur Teodoro de Matos and Luís Filipe F. Reis Thomaz, eds, *As relações entre a India Portuguesa*, *a Asia do Sueste e o Extremo Oriente* (actas do VI Seminário Internacional de História Indo-Portuguesa), Macau, no publisher, 1993, pp. 102–3, 105.
- 37 Anthony R. Disney, 'The World of Long-Distance Voyaging in the Seventeenth Century: The Lisbon–Goa fleet of 1629 as a Case Study', in K.S. Mathew, ed., *Studies in Maritime History*, Pondicherry, Pondicherry University, 1990, p. 150.
- 38 Lobo, *Itinerary*, pp. 300–1.
- 39 Quoted in Anne Bulley, *The Bombay Country Ships*, 1790–1833, London, Curzon, 2000, p. 231.
- 40 Abbé Carré, *The Travels of Abbé Carré in India and the Middle East*, ed. and trans. C.H. Fawcett, vol. III, London, Hakluyt, 1947, pp. 795–8.
- 41 Michael H. Fisher, ed., *The Travels of Dean Mahomet: An Eighteenth-Century Journey through India*, Berkeley, University of California Press, 1997, p. 127.
- 42 Correia-Afonso, ed., Godinho, p. 74 et seq.
- 43 Lobo, *Itinerary*, pp. 301–14.

- 44 Lancaster, *Voyage*, pp. 4–5.
- 45 Lobo, *Itinerary*, p. 311.
- 46 Abbé Carré, *Travels*, III, pp. 792–5.
- 47 O'Kane, trans. and ed., Sulaiman, p. 43.
- 48 Jean Aubin, 'Un voyage de Goa a Ormuz en 1520', *Modern Asian Studies*, XXII, 1988, pp. 417–32.
- 49 Indrani Ray, *The French East India Company*, p. 149. See also an extended account of a similar voyage by river: Mrs Jemima Kindersley, *Letters from the Island of Teneriffe*, *Brazil*, *The Cape of Good Hope*, *and the East Indies*, London, J. Nourse, 1777, pp. 92–7. Her next few pages discuss the difficulties of land travel.
- 50 Fisher, *Dean Mahomet*, p. 125.
- 51 Saris in Samuel Purchas, *Purchas*, *His Pilgrimes*, Glasgow, Hakluyt Society, 1905–7, 20 vols, III, 396.
- 52 T. Bentley Duncan, 'Navigation between Portugal and Asia in the Sixteenth and Seventeenth Centuries', in Cyriac K. Pullapilly et al., eds, *Asia and the West: Encounters and Exchanges from the Age of Explorations: Essays in Honor of Donald F. Lach*, Notre Dame, Ind., Cross Roads Books, 1986, p. 8.
- 53 See Ahsan Jan Qaisar, *The Indian Response to European Technology and Culture, AD 1498–1707*, Delhi, Oxford University Press, 1982, pp. 20–37 for a good summary.
- 54 Bowrey, *A Geographical Account*, pp. 102–3.
- 55 Michel Mollat du Jourdin, *Europe and the Sea*, Oxford, Blackwell, 1993, pp. 156–7; David Kirby and Merja-Liisa Hinkkanen, *The Baltic and the North Seas*, London, Routledge, 2000, p. 189. For Indian ships see my *Pious Passengers*, pp. 55–6.
- 56 Franceso Carletti, *My Voyage Around the World*, trans. Herbert Weinstock, New York, Pantheon Books, 1965, pp. 185–6.

- 57 G.V. Scammell, 'Seafaring in the Estado da India c. 1500–1700', in Teotonio R. de Souza and Charles J. Borges, eds, *Mare Liberum*, no. 9, 1977, 'Portuguese India and its Northern Province, Proceedings of the 7th International Seminar on Indo-Portuguese History'.
- 58 Russell-Wood, World on the Move, p. 58.
- 59 Els M. Jacobs, *In Pursuit of Pepper and Tea: The Story of the Dutch East India Company*, Amsterdam, Netherlands Maritime Museum, 1991.
- 60 Duncan, 'Navigation between Portugal and Asia', p. 6.
- 61 Jeremy Green, 'Maritime Archaeology and the Indian Ocean', *Great Circle*, II, April 1980, p. 6.
- 62 Duncan, 'Navigation between Portugal and Asia', pp. 6–13.
- 63 Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, London, Collins, 1972, p. 358.
- 64 Jaap R. Bruijn, 'Between Batavia and the Cape: Shipping Patterns of the Dutch East India Company', *Journal of Southeast Asian Studies*, XI, September 1980, p. 260.
- 65 Lian Brockey, Brown University, personal communication.
- 66 Disney, 'The World of Long-Distance voyaging', p. 151.
- 67 C.R. Boxer, "For Love of Gain", Hemisphere, XXIII, 3, 1979, pp. 134.
- 68 Carletti, My Voyage, p. 228.
- 69 Boxer, "For Love of Gain", p. 135.
- 70 See generally Disney, 'The World of Long-Distance Voyaging', and Scammell, 'Seafaring in the Estado da India'.
- 71 See Matos and Thomaz, eds, *A carreiera da India*, for numerous studies.
- 72 A. Jan Qaisar, 'From Port to Port: Life on Indian Ships in the Sixteenth and Seventeenth Centuries', in Ashin Das Gupta and M.N. Pearson, eds, *India and the Indian Ocean*, *1500–1800*,

7 Britain and the ocean

- 1 Paul Butel, *The Atlantic*, London, Routledge, 1999, p. 260.
- 2 Hermann Kellenbenz, 'German Trade Relations with the Indian Ocean from the End of the Eighteenth Century to 1870', *Journal of Southeast Asian Studies*, XIII, March 1982, pp. 135–6; Hermann Kellenbenz, 'Shipping and Trade between Hamburg-Bremen and the Indian Ocean, 1870–1914', *Journal of Southeast Asian Studies*, XIII, September 1982, p. 352.
- 3 Emma Tompsitt, *A Diary of My Voyage from London to Sydney*, 19th July to 18th September, 1884, Melbourne, printed by Chas. Troedel & Co., 1884, p. 23.
- 4 George Curzon, *Persia and the Persian Question*, London, Longmans, Green & Co, 1892, 2 vols, I, p. iv. Curzon was not even very important at this time: he was much worse once he became Viceroy of India. Sugata Bose also quotes Curzon in his stunning and provocative essay 'Space and Time in the Indian Ocean Rim: Theory and History', in Leila Tarazi Fawaz and C.A. Bayly, eds, *Modernity and Culture: From the Mediterranean to the Indian Ocean*, New York, Columbia University Press, 2002, pp. 365–88.
- 5 Lady Isabel Burton, *A.E.I. Arabia, Egypt, India: A Narrative of Travel*, London, W. Mullan and Son, 1879, pp. 92–3.
- 6 Om Prakash, 'European Corporate Enterprises and the Politics of Trade in India, 1600–1800', in Rudrangshu Mukherjee and Lakshmi Subramanian, eds, *Politics and Trade in the Indian Ocean World: Essays in Honour of Ashin Das Gupta*, Delhi, Oxford University Press, 1998, p. 177.
- 7 Om Prakash, 'The European Factories in India', in J. Everaert and J. Parmentier, eds, *International Conference on Shipping, Factories and Colonization (Brussels, 24–26 November 1994)*, Brussels, Koninklijke Academie van Belgie, 1996, pp. 19–20 and passim.
- 8 Lakshmi Subramanian, 'Power and the Weave: Weavers, Merchants and Rulers in Eighteenth-Century India', in Mukherjee and Subramanian, eds, *Politics and Trade*, pp. 52–82.
- 9 Butel, The Atlantic, p. 229.

- 10 Lewis R. Fischer and Gerald E. Panting, 'Indian Ports and British Intercontinental Sailing Ships: The Subcontinent as an Alternative Source of Cargo, 1870–1900', in K.S. Mathew, ed., *Mariners*, *Merchants and Oceans: Studies in Maritime History*, New Delhi, Manohar, 1995, pp. 371–84.
- 11 Mariam Dossal, 'Indian Maritime Historiography: West Coast Merchants in a Gobalizing Economy', in Frank Broeze, ed., *Maritime History at the Crossroads: A Critical Review of Recent Historiography*, St Johns, NFLD, International Maritime Economic History Association, 1996, pp. 191–2.
- 12 Doug McLean, 'Complex Relationship: Shippers and Shipowners in India's Overseas Liner Shipping, c. 1890–c.1925', *New Directions in Maritime History*, ICMH/AAMH Conference, Fremantle, 6–10 December 1993, typescript.
- 13 Frank Broeze, Kenneth McPherson and Peter Reeves, 'Imperial Ports of the Indian Ocean,' *UNESCO Review*, 10 March 1985, p. 2.
- 14 For excellent overviews see Frank Broeze, 'The Ports and Port System of the Asian Seas: An Overview with Historical Perspective from c. 1750', *Great Circle*, XVIII, 1996, pp. 73–96; Peter Reeves, Frank Broeze and Kenneth McPherson, 'The Maritime Peoples of the Indian Ocean Region since 1800', *Mariner's Mirror*, 74, 1988, pp. 241–54; K. McPherson, F. Broeze, P. Reeves and J. Wardrop, 'The Social Expansion of the Maritime World of the Indian Ocean: Passenger Traffic and Community Building', in K. Friedland, ed., *The Maritime Aspects of Migration*, Cologne, Bohlau, 1987, pp. 427–40; and especially important an outstanding essay by S. Bhattacharya, 'The Indian Ocean in the Nineteenth and Early Twentieth Centuries', in Satish Chandra, ed., *The Indian Ocean: Explorations in History, Commerce and Politics*, New Delhi, Sage, 1987, pp. 302–16.
- 15 Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History*, Vol. I, Oxford, Blackwell, 2000, p. 43.
- 16 Peter Gifford, 'The Effects of the British Seaman's Strike of 1925 on Fremantle', *Great Circle*, XIV, 2, 1992, p. 74.
- 17 Anthony Reid and Radin Fernando, 'Shipping in Melaka and Singapore as an Index of Growth, 1760–1840', in M.N. Pearson and I. Bruce Watson, eds, *South Asia*, 1996, XIX, Special Issue, 'Asia and Europe: Commerce, Colonialism and Cultures: Essays in Honour of Sinnappah Arasaratnam', pp. 61 et seq.

- 18 Fanny Parks, *Wanderings of a Pilgrim*, *in Search of the Picturesque*, London, P. Richardson, 1850, 2 vols, II, p. 480; Roy T. Sawyer, 'The Trade in Medicinal Leeches in the Southern Indian Ocean in the Nineteenth Century', *Medical History*, 43, 1999, pp. 241–5.
- 19 A.T. Yarwood, Walers: Australian Horses Abroad, Melbourne, Melbourne University Press, 1989.
- 20 Curzon, Persia, I, p. 4.
- 21 Andrew Pope, 'The P&O and the Asian Specie Network, 1850–1920', Typescript, 1992, p. 1; Andrew Pope, 'Australian Gold and the Finance of India's Exports during World War I: A Case Study of Imperial Control and Coordination', *Indian Economic and Social History Review*, 33, 2, 1996, pp. 115–31.
- 22 David Mitchell, *Pirates*, London, Thames and Hudson, 1976, p. 11.
- 23 P.A.B. Thomson, 'Jean François Hodoul, Corsair of the Indian Ocean', *Mariner's Mirror*, 83, 1997, pp. 310–17.
- 24 George Windsor Earl, *The Eastern Seas*, or *Voyages and Adventures in the Indian Archipelago in* 1832–34, London, W.H. Allen & Co, 1837, pp. 38–42.
- 25 Quoted in Lakshmi Subramanian, 'Of Pirates and Potentates: Maritime Jurisdiction and the Construction of Piracy in the Indian Ocean', in Devleena Ghosh and Stephen Muecke, eds, *UTS Review*, 2000, VI, 2, 'The Indian Ocean', p. 22.
- 26 Charles Belgrave, *The Pirate Coast*, New York, Roy Publishers, 1966, p. 33.
- 27 Sultan Md. Al-Qasimi, The Myth of Arab Piracy in the Gulf, London, Croom Helm, 1986, p. xv.
- 28 Ibid., p. 226.
- 29 Curzon, Persia, II, p. 308.
- 30 Ibid., II, pp. 450–1. For these events see Patricia Risso, 'Cross-Cultural Perceptions of Piracy: Maritime Violence in the Western Indian Ocean and Persian Gulf Region during the Long Eighteenth Century', in *Journal of World History*, XII, 2001, pp. 293–319, and Qasimi, *The Myth of Arab Piracy*, passim. His conclusions have been vigorously challenged in Charles E. Davies, *The Blood-Red Arab Flag: An Investigation into Qasimi Piracy*, *1797–1820*, Exeter, Exeter University Press, 1997.

- 31 W.A.R. Richardson, 'An Indian Ocean Pilgrimage in Search of an Island', *Great Circle*, XI, 2, 1989, pp. 32–51.
- 32 Rhys Richards, 'The Maritime Fur Trade: Sealers and Other Residents on St Paul and Amsterdam Islands', *Great Circle*, VI, 1, 1984, p. 24.
- 33 Butel, *The Atlantic*, pp. 232–4.
- 34 David Arnold, *Science*, *Technology and Medicine in Colonial India*, Cambridge University Press, 2000, pp. 104–5; Daniel Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century*, New York, Oxford University Press, 1981, pp. 19 et seq.
- 35 Frances Eden, *Tigers*, *Durbars and Kings: Fanny Eden's Indian Journals*, 1837–1838, London, Murray, 1988, p. 57.
- 36 Quoted in Arnold, Science, Technology and Medicine, p. 105.
- 37 G.L. Sulivan, *Dhow Chasing in Zanzibar Waters and on the Eastern Coast of Africa: Narrative of Five Years' Experience in the Suppression of the Slave Trade*, London, Sampson Low, Marston, Low & Searle, 1873, p. 133.
- 38 Ida Pfeiffer, *A Lady's Second Journey around the World*, London, Longman, Brown, Green, and Longmans, 1855, 2 vols, I, p. 103.
- 39 K. Dharmasena, 'Colombo: Gateway and Oceanic Hub of Shipping', in Frank Broeze, ed., *Brides of the Sea: Port Cities of Asia from the 16th-20th Centuries*, Sydney, University of New South Wales Press, 1989, pp. 152–72.
- 40 Gillian Tindall, City of Gold: The Biography of Bombay, Harmondsworth, Penguin, 1992, p. 137.
- 41 Quoted in Freda Harcourt, 'The P&O Company: Flagships of Imperialism', in S. Palmer and G. Willians, eds, *Charted and Uncharted Waters*, London, National Maritime Museum in association with the Department of History, Queen Mary College, University of London, 1982, p. 6. Harcourt is the great authority on this and the following matters. See also her 'British Oceanic Mail Contracts in the Age of Steam, 1838–1914', *Journal of Transport History*, IX, March 1988, pp. 1–18, and 'P&O and Orient: A Cool Partnership, 1886–1914', *Great Circle*, XVII, 1995, pp. 73–94.

- 42 Pope, 'The P&O and the Asian Specie Network', pp. 3–4.
- 43 J. Forbes Munro, 'The "Scrubby Scotch Screw Company": British India Steam Navigation Co.'s Coastal Services in South Asia, 1862–1870', in Lewis R. Fischer, ed., *From Wheel House to Counting House: Essays in Maritime Business History*, St John's, NFLD, International Maritime Economic History, 1992, pp. 45, 65, 71.
- 44 Stephanie Jones, 'British India Steamers and the Trade of the Persian Gulf, 1862–1914', *Great Circle*, VII, 1985, pp. 23–44.
- 45 J. Forbes Munro, 'Shipping Subsidies and Railway Guarantees: William Mackinnon, Eastern Africa and the Indian Ocean, 1860–93', *Journal of African History*, 28, 1987, pp. 209–30.
- 46 Frank Broeze, 'From Imperialism to Independence: The Decline and Re-Emergence of Asian Shipping', *Great Circle*, IX, 1987, pp. 82–4.
- 47 Frank Broeze, 'Merchants from Steam to Sail: The West Australian Shipping Association and the Evolution of the Conference System, 1884–1910', in Fischer, ed., *From Wheel House to Counting House*, pp. 273–301.
- 48 Headrick, *The Tools of Empire*, pp. 142–8, 165–6; F.J.A. Broeze, K.I. McPherson and P.D. Reeves, 'Engineering and Empire: the Making of The Modern Indian Ocean Ports', in Satish Chandra, ed., *The Indian Ocean*, pp. 264–5.
- 49 Account of a voyage to Australia by Joseph Woodhouse, Australian National Maritime Museum, 1884, n.p., typescript.
- 50 Freda Harcourt, 'P&O and Orient', p. 73.
- 51 Munro, 'The "Scrubby Scotch Screw Company", pp. 52–3.
- 52 Account of a voyage to Australia by Colin MacKenzie, Australian National Maritime Museum, 1890, n.p., typescript.
- 53 Sulivan, *Dhow Chasing*, p. 167.
- 54 Boyd Cable, *A Hundred Year History of the P. & O. Peninsular and Oriental Steam Navigation Company*, London, I. Nicholson and Watson, 1937, pp. 111–16.

- 55 Tompsitt, A Diary, p. 11.
- 56 Curzon, *Persia*, II, 467–8.
- 57 Broeze, 'From Imperialism to Independence', pp. 78–80.
- 58 J.N.F.M. À Campo, 'Perahu and Kapal: The Interaction of Traditional and Modern Shipping in Colonial Indonesia', in Everaert and Parmentier, eds, *International Conference*, pp. 343–66.
- 59 Alan Villiers, *The Set of the Sails: The Adventures of a Cape Horn Seaman*, London, Pan, 1955 (first ed. 1940), p. 246.
- 60 Eric Newby, *The Last Grain Race*, London, Picador, 1990 (first ed. 1956), p. 152 and passim.
- 61 Quoted in David Kirby and Merja-Liisa Hinkkanen, *The Baltic and the North Seas*, London, Routledge, 2000, p. 221.
- 62 Villiers, *The Set of the Sails*, pp. 136–7.
- 63 Janet J. Ewald, 'Crossers of the Sea: Slaves, Freedmen, and Other Migrants in the Northwestern Indian Ocean, c. 1750–1914', *American Historical Review*, February 2000, 105, pp. 75–6.
- 64 Mark Twain, *Following the Equator: A Journey around the World*, Hartford, American Publishing Co., 1897, p. 331.
- 65 Accounts of voyages to Australia by Lancelot L. Earl and Richard James Whyte, Australian National Maritime Museum, n.p., typescript.
- 66 Newby, *The Last Grain Race*, pp. 112, pp. 117–18.
- 67 Parks, Wanderings of a Pilgrim, I, 11.
- 68 Jackson, 'The Decline of the Wool Clippers', *Great Circle*, II, 1980, p. 93.
- 69 Burton, A.E.I., pp. 397, 64–71.
- 70 Gavin Young, *Halfway Around the World: An Improbable Journey*, New York, Random House, 1981, pp. 243–66.

- 71 Burton, *A.E.I.*, p. 65.
- 72 A much-studied subject. See Hugh J. Schonfield, *The Suez Canal*, Harmondsworth, Penguin, 1938, p. 111; Frank Broeze, Peter Reeves and Kenneth McPherson, 'Imperial Ports And The Modern World Economy: The Case Of The Indian Ocean', *Journal of Transport History*, VII, 2, 1986, p. 1; Elias H. Tuma, 'Suez Canal: Another Dimension in the European Network', *Journal of European Economic History*, 24, 1995, p. 623.
- 73 Tuma, 'Suez Canal', pp. 623–5.
- 74 Ewald, 'Crossers of the Sea', p. 79.
- 75 Quoted in Malcolm Tull, *A Community Enterprise: The History of the Port of Fremantle, 1897 to 1997*, St Johns, NFLD, International Maritime Economic History Association, 1997, pp. 123–4.
- 76 Quoted in Broeze et al., 'Engineering and Empire', p. 259.
- 77 Mrs Jemima Kindersley, *Letters from the Island of Teneriffe*, *Brazil*, *The Cape of Good Hope*, *and the East Indies*, London, J. Nourse, 1777, p. 81.
- 78 Ibid., pp. 82–3.
- 79 Parks, *Wanderings of a Pilgrim*, II, pp. 474–5.
- 80 Maria Graham, Journal of a Residence in India, Edinburgh, A. Constable, 1812, p. 148.
- 81 Earl, *The Eastern Seas*, pp. 23–4.
- 82 Broeze et al., 'Imperial Ports of the Indian Ocean', p. 5.
- 83 Broeze et al., 'Engineering and Empire', pp. 270–1 and passim for engineering works in ports around the littoral.
- 84 K. Dharmasena, 'Colombo: Gateway and Oceanic Hub of Shipping', in Broeze, ed., *Brides of the Sea*, pp. 154 et seq.; K. Dharmasena, 'The Port and Dock Workers of Colombo, 1860–1960', *Great Circle*, VII, 2, p. 104 et seq.

- 85 Indu Banga, 'Karachi and its Hinterland under Colonial Rule', in Indu Banga, ed., *Ports and their Hinterlands in India*, *1700–1950*, New Delhi, Manohar, 1992, pp. 337–58.
- 86 Tindall, *City of Gold*, pp. 24–8 for a good description.
- 87 I.S. van Dongen, 'Mombasa in the Land and Sea Exchange of East Africa', *Erdkunde*, 17, 1963, pp. 16–38; B.S. Hoyle, 'Maritime Perspectives on Ports and Port Systems: The Case of East Africa', in Broeze, ed., *Brides of the Sea*, pp. 188–206.
- 88 Broeze et al., 'Imperial Ports of the Indian Ocean', p. 2.
- 89 Broeze et al., 'Imperial Ports and the Modern World Economy', pp. 18–19.
- 90 Arnold, Science, Technology and Medicine, p. 102.
- 91 Satpal Sangwan, 'The Sinking Ships: Colonial Policy and the Decline of Indian Shipping, 1735–1835', in Roy MacLeod and Deepak Kumar, eds, *Technology and the Raj: Western Technology and Technical Transfers to India*, 1700–1947, New Delhi, Sage, 1995, pp. 137–52.
- 92 For all of this see Frank Broeze's seminal article, 'Underdevelopment and Dependence: Maritime India under the Raj', *Modern Asian Studies*, XVIII, 1984, pp. 429–57.
- 93 Lakshmi Subramanian, *Indigenous Capital and Imperial Expansion: Bombay, Surat, and the West Coast*, Delhi, Oxford University Press, 1996, p. 15.
- 94 Hans-Dieter Evers, 'Chettiar Moneylenders in Southeast Asia', in Denys Lombard and Jean Aubin, eds, *Marchands et hommes d'affairs asiatiques dans l'Océan Indien et la Mer de Chine 13e-20e siècles*, Paris, Editions de l'Ecole des hautes études en sciences sociales, 1988, pp. 199–219. For the notion of circulation see Claude Markovits, *The Global World of Indian Merchants*, Cambridge, Cambridge University Press, 2000.
- 95 Desh Gupta, 'South Asians in East Africa: Achievement and Discrimination', in Lance Brennan and Brij Lal, eds, *South Asia*, 1998, XXI, special issue, 'Across the Kala Pani: Indian Overseas Migration and Settlement', p. 106.
- 96 Richard F. Burton, *Zanzibar*, *City*, *Island and Coast*, Vol. II, London, Tinsley Brothers, 1872, pp. 327–8.

97 Quoted in Gervase Clarence-Smith, 'Indian Business Communities in the Western Indian Ocean in the Ninteenth Century', *Indian Ocean Review*, II, 4, December 1989, p. 20.

98 Earl, *The Eastern Seas*, pp. 177–8.

99 Rhys Richards, 'The Maritime Fur Trade: Sealers and Other Residents on St Paul and Amsterdam Islands', *Great Circle*, VI, 1 and 2, 1984, pp. 24–42 and 93–109.

100 Pfeiffer, *A Lady's Second Journey*, p. 148. For slavery see Gervase Clarence-Smith, ed., *The Economics of the Indian Ocean Slave Trade in the Nineteenth Century*, London, Cass, 1989.

101 Generally see K. McPherson, et al., 'The social expansion', in Friedland, ed., *Maritime Aspects*, pp. 427–40.

102 Hugh Tinker, *A New System of Slavery: The Export of Indian Labour Overseas*, 1830–1920, London, Oxford University Press, 1974, and for a more positive view David Northrup, *Indentured Labour in the Age of Imperialism*, 1834–1922, Cambridge, Cambridge University Press, 1995. For Indians see Lance Brennan and Brij Lal, eds, 'Across the Kala Pani: Indian Overseas Migration and Settlement', *South Asia*, XXI, 1998, Special Issue.

103 Robert C.-H. Shell, 'Islam in Southern Africa, 1652–1998', in Nehemia Levtzion and Randall L. Pouwels, eds, *The History of Islam in Africa*, Athens, Ohio, Ohio University Press, 2000, p. 339.

104 The standard work is Marina Carter, *Servants*, *Sirdars and Settlers: Indians in Mauritius*, *1834–1874*, Delhi, Oxford University Press, 1995. Also Tayyab Mahmud, 'Colonial Migrations and Post-Colonial Identities in South Asia', *South Asia*, XXIII, 1, 2000, pp. 90–2.

105 Ralph Shlomowitz, 'Mortality of Indian Labour on Ocean Voyages, 1843–1917', *Studies in History*, Delhi, VI, 1, January 1990, pp. 35–65.

106 Moti Lal Bhargava, *Indian Ocean Strategies through the Ages*, with Rare and Antique Maps, New Delhi, Reliance Publishing House, 1990, p. 132.

107 David Arnold, 'The Indian Ocean as a Disease Zone, 1500–1950', *South Asia*, 14, 1991, pp. 1–21.

- 108 Mirza Abu Taleb Khan, *Travels in Asia*, *Africa and Europe during the years 1799 to 1803*, New Delhi, Sona Publications, 1972 (first published 1814), pp. 8–21.
- 109 Graham, Journal of a Residence, p. 173.
- 110 Mark Staniforth, 'Diet, Disease and Death at Sea 1837–39', *New Directions in Maritime History*, ICMH/AAMH Conference, Fremantle, 6–10 December 1993, typescript.
- 111 Emma Roberts, *The East-India Voyager: Or Ten Minutes Advice to the Outward Bound*, London, J. Madden & Co., 1845, pp. 3–11.
- 112 'Trench's Travels', *Indian Ocean Review*, I, 3, September 1988, p. 2.
- 113 Eliza Fay, *Original Letters from India*, Calcutta, 1817, pp. 104–9, 218–19, 231. The punctuation is hers.
- 114 Account of a voyage to Australia by Lancelot L. Earl, Australian National Maritime Museum, n.p., typescript.
- 115 Parks, Wanderings of a Pilgrim, II, pp. 478–9.
- 116 Lancelot L. Earl.
- 117 Parks, Wanderings of a Pilgrim, I, p. 11.
- 118 Account of a voyage to Australia by Richard James Whyte, Australian National Maritime Museum, n.p., typescript.
- 119 Twain, Following the Equator, pp. 615–17.
- 120 Burton, *A.E.I.*, pp. 404–5.
- 121 E.J. Harding, *Dominions Diary: The Letters of E.J. Harding 1913–1916*, ed. S. Constantine, Halifax, Ryburn Pubs, 1992, pp. 40–2, 50, 52, 54.
- 122 Helen Rutledge, ed., *A Season in India: Letters of Ruby Madden. Experiences of an Australian Girl at the Great Coronation Durbar, Delhi, 1903*, Sydney, Fontana Books, 1982, pp. 22–34, 39.

123 Charles Allen, ed., *Plain Tales from the Raj*, illustrated edition, New York, Holt, Rinehart and Winston, 1985, pp. 32, 35.

124 Sulivan, Dhow Chasing, p. 99.

125 Leonard Woolf, *Growing: An Autobiography of the Years 1904–1911*, New York, Harcourt, Brace & World, 1962, pp. 11–21.

126 Lady Anna Brassey, *A Voyage in the Sunbeam: Our Home on the Ocean for Eleven Months*, London, Longmans, Green, 1878, pp. 467–8.

127 Ibid, pp. vii-viii.

128 Ibid., passim.

129 Account of a voyage to Australia by Wilfred Pearce, Australian National Maritime Museum, n.p., typescript.

130 Bryce Moore, Helen Garwood and Nancy Lutton, *The Voyage Out: 100 Years of Sea Travel to Australia*, Fremantle, Fremantle Arts Centre Press in association with The Library Board of Western Australia, 1991.

131 Accounts of voyages to Australia by James Murray and William Heeley, Australian National Maritime Museum, n.p., typescript.

132 Barry Pemberton, *Australian Coastal Shipping*, Melbourne, Melbourne University Press, 1979, p. 208.

133 Juanita Harrison, *My Great, Wide, Beautiful World*, 2nd ed., New York, G.K. Hall, 1996. The quotations are from, respectively, pp. 296, 96–8, 117, 160–1, 157–8, 159, 164.

134 A brief statement of the thesis is in *The Encyclopedia of Religion*, ed. Mircea Eliade, New York, Macmillan, 1987, 16 vols, XI, p. 328.

135 E.M. Forster, *Selected Letters*, vol. I, ed. Mary Lago and P.N. Furbank, London, Collins, 1983, pp. 138–40.

136 Twain, *Following the Equator*, pp. 615–17.

- 137 Parks, Wanderings of a Pilgrim, I, p. 3.
- 138 Woolf, *Growing*, pp. 11–21, 246–7.
- 139 Moore et al., Voyage Out, p. 162.
- 140 Account of a voyage to Australia by Joseph Woodhouse, Australian National Maritime Museum, n.p., typescript.
- 141 Tompsitt, A Diary of my Voyage, pp. 15–16.
- 142 Account of a voyage to Australia by Dr Mackenzie, Australian National Maritime Museum, n.p. typescript.
- 143 Forster, Selected Letters, p. 140.
- 144 Moore et al., *Voyage Out*, pp. 157–8, 160.
- 145 Burton, A.E.I., p. 400.
- 146 Australian National Maritime Museum, accounts of voyages to Australia by William Lawrence and William Heeley, n.p., typescript.
- 147 Moore et al., Voyage Out, p. 165.
- 148 Harding, Dominions Diary, p. 56.
- 149 Joseph Conrad, *Typhoon*, *and other Tales*, New York, New American Library, 1963, pp. 244–7 (the story of 'Youth').
- 150 Allen, *Plain Tales*, pp. 36–7.
- 151 'Trench's Travels', *Indian Ocean Review*, I, 2, June 1988, p. 11.
- 152 Burton, A.E.I., pp. 296, 379–81.
- 153 Juanita Harrison, *My Great Wide*, *Beautiful World*, pp. 146–7.

154 Frances Eden, *Tigers*, pp. 50–1.

155 Burton, A.E.I., pp. 75–83, 93–107.

156 Both quoted in Anne Bulley, *The Bombay Country Ships*, 1790–1833, London, Curzon, 2000, pp. 230–1, 47.

157 Alan Villiers, Sons of Sinbad: An Account of Sailing with the Arabs in the Dhows, in the Red Sea, around the Coasts of Arabia, and to Zanzibar and Tanganyika; Pearling in the Persian Gulf; and the Life of the Shipmasters, the Mariners and Merchants of Kuwait, New York, C.Scribner's Sons, 1940, p. 35.

158 Devleena Ghosh and Stephen Muecke, 'Indian Ocean Stories', in *UTS Review*, VI, 2, 'The Indian Ocean', 2000, pp. 34–5; Philippe Reignier, 'Saint Expédit', in ibid., pp. 70–7.

159 Stephen F. Dale, *Islamic Society on the South Asian Frontier: The Mappilas of Malabar, 1498–1922*, Oxford, Clarendon Press, 1980, pp. 6–7, 116–18, 128, 134–5, 167.

160 Much of what follows comes from M.N. Pearson, 'Gateways to Africa: The Indian Ocean and the Red Sea', in Levtzion and Pouwels, eds, *History of Islam in Africa*, pp. 37–59, where more detail will be found.

161 Gill Shepherd, 'Trading Lineages in Historical Perspective', in J.C. Stone, ed., *Africa and the Sea: Proceedings of a Colloquium at the University of Aberdeen, March*, 1984, Aberdeen, University of Aberdeen, 1985, p. 172.

162 Abdin Chande, 'Radicalism and Reform in East Africa', in Levtzion and Pouwels, eds, *History of Islam in Africa*, p. 355 and passim.

163 Michael Lambek, 'Choking on the Quran: And other Consuming Parables from the Western Indian Ocean Front', in Wendy James, ed., *The Pursuit of Certainty: Religious and Cultural Formulations*, London, Routledge, 1995, p. 263.

164 Azyumardi Azra, 'A Hadhrami Religious Scholar in Indonesia: Sayyid Uthman', in Ulrike Freitag and W.G. Clarence-Smith, *Hadhrami Traders*, *Scholars and Statesmen in the Indian Ocean*, *1750s-1960s*, Leiden, Brill, 1997, pp. 249–63.

8 History in the ocean

- 1 Omar Khalidi, 'The Hadhrami Role in the Politics and Society of Colonial India, 1750s-1950s', in Ulrike Freitag and William G. Clarence-Smith, eds, *Hadhrami Traders*, *Scholars and Statesmen in the Indian Ocean*, *1750s-1960s*, Leiden, Brill, 1997, p. 78 and passim.
- 2 See W.G. Clarence-Smith, 'Introduction', in Freitag and Clarence-Smith, eds, ibid.
- 3 Gérard Naulleau, 'Islam et affairs: Le cas des familles marchandes du Gulfe', in Denys Lombard and Jean Aubin, eds, *Marchands et hommes d'affairs asiatiques dans l'Océan Indien et la Mer de Chine 13e-20e siècles*, Paris, Editions de l'Ecole des hautes études en sciences sociales, 1988, pp. 297–310.
- 4 Béatrice Knerr, 'Labour Export from South Asia: Another Case of the "Dutch Disease"?', in Giorgio Borsa, ed., *Trade and Politics in the Indian Ocean: Historical and Contemporary Perspectives*, Delhi, Manohar, 1990, pp. 169–221.
- 5 Amitav Ghosh, *In an Antique Land: History in the Guise of a Traveler's Tale*, New York, Vintage Books, 1993, pp. 270–2, 284–5.
- 6 Stella Mascarenhas-Keyes, 'International Migration from Goa: The Significance of the Global and Local Political Economy and Socio-Cultural Factors', Teotonio R. de Souza, ed., *Vasco da Gama and India, International Conference*, Lisbon, Gulbenkian, 1999, 3 vols, II, pp. 235–49.
- 7 Lady Anna Brassey, *A Voyage in the Sunbeam: Our Home on the Ocean for Eleven Months*, London, Longmans, Green, 1878, p. 412.
- 8 Moussa Said, 'Souvenirs d'un vieux marchand indien des Comores', in *Historical and Cultural Relations between France and India*, *17–20th centuries*, Sainte Clotilde, Association historique internationale de l'Océan Indien, 1987, pp. 107–10.
- 9 Alan Villiers, Sons of Sinbad: An Account of Sailing with the Arabs in the Dhows, in the Red Sea, around the Coasts of Arabia, and to Zanzibar and Tanganyika; Pearling in the Persian Gulf; and the Life of the Shipmasters, the Mariners and Merchants of Kuwait, New York, C.Scribner's Sons, 1940.
- 10 M. McCarthy, 'Indonesian Divers in Australia's Northern Waters', *Great Circle*, XX, 1998, p. 122.

- 11 W. Somerset Maugham, *The Gentleman in the Parlour*, 1930, part of *The Travel Books of W. Somerset Maugham*, London, William Heinemann, 1955, pp. 114–15, 169.
- 12 Frank Broeze, 'From Imperialism to Independence: The Decline and Re-Emergence of Asian Shipping', *Great Circle*, IX, 1987, p. 85.
- 13 Frank Broeze, 'Underdevelopment and Dependence: Maritime India under the Raj', *Modern Asian Studies*, XVIII, 1984, pp. 447–55.
- 14 Gavin Young, *Halfway Around the World: An Improbable Journey*, New York, Random House, 1981.
- 15 Maugham, The Gentleman in the Parlour, p. 114.
- 16 Young, Halfway Around the World, pp. 326, 283, 300.
- 17 Ibid., p. 216.
- 18 Australian Association for Maritime History, 'Newsletter', March 1999, no. 74, p. 5, note by Vic Jeffery.
- 19 Young, Halfway Around the World, p. 262.
- 20 Derek Johnson, 'Wealth and Waste: Contrasting Legacies of Fisheries Development in Gujarat since 1950s', *Economic and Political Weekly* (Mumbai) 31 March 2001.
- 21 Villiers, Sons of Sinbad, p. 159.
- 22 Hassan Saleh Shihab, 'Traditional Arab Shipping and Seafaring in the Indian Ocean', *New Directions in Maritime History*, ICMH/AAMH Conference, Fremantle, 6–10 December 1993, typescript.
- 23 Edward Prados, 'Indian Ocean Littoral Maritime Evolution: The Case of the Yemeni *huri* and *sanbuq*', *Mariner's Mirror*, 83, 1997, pp. 185–98. This excellent study is based on the Red Sea coast of Yemen in the mid 1990s. For other dhow studies see page 298 above, f.ns. 5 and 6.
- 24 Mark Horton and John Middleton, *The Swahili: The Social Landscape of a Mercantile Society*, Oxford, Blackwells, 2000, p. 88.

- 25 Peter Boxhall, 'Arabian Seafarers in the Indian Ocean', *Asian Affairs*, 76, 1989, pp. 287–95.
- 26 Esmond Bradley Martin, 'The Present Day Dhow Trade of India', *Great Circle*, IV, October 1982, pp. 105–18.
- 27 Esmond Bradley Martin, 'The Decline of the Omani Dhows', *Great Circle*, II, 1980, 74–86.
- 28 Nick Birmingham, 'The Exceptional Janggolan', *Indian Ocean Review*, VII, 4, March 1995, pp. 7–8.
- 29 Young, Halfway Around the World, pp. 184–205.
- 30 Tim Mackintosh-Smith, 'The Last Place in Yemen', *Aramco World*, September–October 1999, pp. 13–15.
- 31 Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History*, Vol. I, Oxford, Blackwell, 2000, pp. 227, 229, 346, 382; Richard H. Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600–1860*, Cambridge, Cambridge University Press, 1995. For a sober more or less factual survey see Helen Chapin Metz, *Indian Ocean: Five Island Countries*, Washington, DC, Federal Research Division, Library of Congress, 1995, 3rd ed.
- 32 Mackintosh-Smith, 'The Last Place in Yemen', pp. 9, 11.
- 33 Richard Barz, 'The Cultural Significance of Hindi in Mauritius', *South Asia*, III, 1980, pp. 1–13.
- 34 Shelton A. Gunaratne, Mohd. Safar Hasim and Roukaya Kasenally, 'Small is Beautiful: Information Potential of Three Indian Ocean Rim Countries', *Media Asia*, XXIV, 4, 1997, pp. 199–200; D. McDougall, 'Indian Ocean Regionalism', *The Round Table*, 341, 1997, pp. 54–5; Bob Newman, 'Letter from Mauritius', *Indian Ocean Newsletter*, VIII, 3, November 1987, p. 4; C.W. Binns, 'Islands '88', *Indian Ocean Review*, I, 3, September 1988, p. 7.
- 35 McDougall, 'Indian Ocean Regionalism', pp. 58–9; Jean Houbert, 'France in the Indian Ocean: Decolonizing without disengaging', *The Round Table*, 298, 1986, pp. 145–66.
- 36 Christian Ghasarian, 'We have the Best Gods! The Encounter Between Hinduism and Christianity in La Réunion', *Journal of Asian and African Studies*, 32, 3–4, December 1997, pp. 286–95.

- 37 A. Whitehead, 'Indian Ocean Regionalism', *The Round Table*, 341, 1997, pp. 53–4; Andrew D.W. Forbes, 'Archives and Resources for Maldivian History', *South Asia*, III, 1980, p. 70.
- 38 Michel Mollat du Jourdin, *Europe and the Sea*, Oxford, Blackwell, 1993, p. 232–4.
- 39 Paul Butel, *The Atlantic*, London, Routledge, 1999, p. 288.
- 40 See generally Keith Trace, 'For "Tyrrany of Distance" read "Tyrrany of Scale": Australia and the Global Container Market', *Great Circle*, 23, 2001, pp. 21–46.
- 41 B.S. Hoyle, 'Maritime Perspectives on Ports and Ports Systems: The Case of East Africa', and Atiya Habeeb Kidwai, 'Port Cities in a National System of Ports and Cities: A Geographical Analysis of India in the Twentieth Century', both in Frank Broeze, ed., *Brides of the Sea: Port Cities of Asia from the 16th-20th Centuries*, Sydney, University of New South Wales Press, 1989, pp. 204, 212–20.
- 42 Keith Trace, 'ASEAN Ports since 1945: Maritime Change and Port Rivalry', in Frank Broeze, ed., *Gateways of Asia: Port Cities of Asia from the 13th to the 20th Centuries*, London, Kegan Paul International, 1997, pp. 318–38.
- 43 Sydney Morning Herald, 17 September 2002.
- 44 Personal inspection of Dampier, and information from Hamersley Iron.
- 45 John R. Stilgoe, *Alongshore*, New Haven, Yale University Press, 1994, p. 64.
- 46 Olma Mignacca, *The Watcher on the Quay*, Sydney, New Holland Publications, 1998, p. 63 and passim.
- 47 Angus Phillips, 'The Whitbread Race into Danger', *National Geographic*, May 1998, pp. 118–33.
- 48 See Jeff Harris, 'The Dhow of Racing', in *Aramco World*, 50, 3, May/June 1999, pp. 2–11 for a very useful account.
- 49 Metz, Indian Ocean, pp. xix, xxiii, 163.
- 50 Peter Reeves, Andrew Pope, John McGuire and Bob Pokrant, 'The Koli and the British at Bombay: The Structure of their Relations to the mid-Nineteenth Century', in M.N. Pearson and I.

Bruce Watson, eds, *South Asia*, 1996, XIX, Special Issue, 'Asia and Europe: Commerce, Colonialism and Cultures: Essays in Honour of Sinnappah Arasaratnam', pp. 97–120.

- 51 P. Reeves, A. Pope, J. McGuire and B. Pokrant, 'Mapping India's Maritime Resources: Colonial State Experiments, c. 1908–1930', *South Asia*, XIX, 1996, p. 14; Daniel Behrman, *Assault on the Largest Unknown: The International Indian Ocean Expedition*, 1959–65, Paris, Unesco Press, 1981, p. 70; Peter Reeves, Frank Broeze and Kenneth McPherson, 'The Maritime Peoples of the Indian Ocean Region since 1800', *Mariner's Mirror*, 74, 1988, p. 243; Sanjay Chaturvedi, 'Common Security? Geopolitics, Development, South Asia and the Indian Ocean', *Third World Quarterly*, XIX, 1998, p. 713.
- 52 Kathleen Fordham Norr, 'The Organisation of Coastal Fishing in Tamilnadu', in Alexander Spoehr, ed., *Maritime Adaptations, Essays on Contemporary Fishing Communities, Contributions from Ethnology*, Pittsburg, University of Pittsburg Press, 1980, pp. 113–27, and in the same volume Paul Alexander, 'Sea Tenure in Southern Sri Lanka', pp. 91–111.
- 53 R.S. Newman, 'Green Revolution–Blue Revolution: The Predicament of India's Traditional Fishermen', *South Asia*, IV, 1981, pp. 35–46.
- 54 Olga Nieuwenhuys, 'Invisible Nets: Women and Children in Kerala's Fishing', *MAST*, II, 1989, pp. 174–94.
- 55 Jona Halfdanardottir, 'Social Mobilization in Kerala: Fishers, Priests, Unions and Political Parties', *MAST*, VI, 1993, pp. 136–56.
- 56 Holly M. Hapke, 'Development, Gender and Household Survival in a Kerala Fishery', *Economic and Political Weekly*, 31 March 2001, and see also Nieuwenhuys 'Invisible Nets', for an older analysis.
- 57 Derek Johnson, 'Wealth and Waste: Contrasting Legacies of Fisheries Development in Gujarat since 1950s', *Economic and Political Weekly*, 31 March 2001.
- 58 Sydney Morning Herald, 23 February 2002.
- 59 Bob Pokrant, 'Export-Oriented Aquaculture in Bangladesh: Changing Business Practices, Labour Organisation and Local Environments', *Indian Ocean Review*, XIII, 1, March 2000, pp. 8–10.

- 60 Bob Pokrant and Peter Reeves, 'Putting Globalisaton in its Place: Globalisation, Liberalisation and Export-Oriented Aquaculture in West Bengal and Bangladesh', *South Asia*, XXIV, 2001, pp. 159–84; Kazi Ali Toufique, 'Sandwiched between "Us" and "Them": Dilemmas and Contradictions in the Shrimp-Processing Export Sector of Bangladesh in the Globalisation Process', *South Asia*, XXIV, 2001, pp. 185–99.
- 61 Janet Ahner Rubinoff, 'Pink Gold: Transformation of Backwater Aquaculture on Goa's Khazan Lands', *Economic and Political Weekly*, 31 March 2001.
- 62 Gervase Clarence-Smith, 'Introduction', in Clarence-Smith, ed., *The Economics of the Indian Ocean Slave Trade in the Nineteenth Century*, London, Cass, 1989, pp. 7–8.
- 63 David Armine Howarth, Dhows, London, New York, Quartet Books, 1977, p. 149.
- 64 Villiers, Sons of Sinbad, p. 299 et seq.
- 65 Based on personal observation, discussions with experts in Broome, and two books by Hugh Edwards: *Port of Pearls*, Swanbourne, WA, the author, 1984, and *Broome's South Sea Pearls: The World's Finest Ocean Gems*, Broome, published for Willie Creek Pearls, n.d.
- 66 Tim Winton, *Land's Edge*, Sydney, Macmillan Australia, 1993, pp. 9, 13.
- 67 Lena Lencek and Gideon Bosker, *The Beach: The History of Paradise on Earth*, New York, Viking, 1998, p. xx.
- 68 Paul Routledge, 'Consuming Goa: Tourist Site as Dispensable Space', *Economic and Political Weekly*, 22, 7, 2000; Devika Sequeira, 'Tourism: Battling the Global Downspin', *Goa Newsletter*, November 2001.
- 69 Alexander Frater, Chasing the Monsoon, Harmondsworth, Penguin, 1991, p. 44.
- 70 Routledge, 'Consuming Goa', pp. 2647, 2651–2 and passim.
- 71 McDougall, 'Indian Ocean Regionalism', pp. 55–6; Denis Fair, 'Tourist Trends in the Indian Ocean Islands', *Africa Insight*, XXVII, 1997, pp. 279–83; 'Life's a Beach', *Orient-Express Magazine*, XI, 4, 1994, pp. 60–3.
- 72 McDougall, 'Indian Ocean Regionalism', pp. 57–8.

73 David Kirby and Merja-Liisa Hinkkanen, *The Baltic and the North Seas*, London, Routledge, 2000, p. 275.

74 'Shipping: Arabian Fights', *The Economist (US)*, 10 April, 1999, vol. 351.

75 Charles Geshekter, 'Somali History and Regional Sub-Cultures: A Neglected Theme of the Somali Crisis', in *New Directions in Maritime History*, ICMH/AAMH Conference, Fremantle, 6–10 December 1993, typescript.

76 Jennifer Ackerman, 'New Eyes on the Oceans', *National Geographic*, October 2000, p. 112; Clive Wilkinson, Olaf Linden, Herman Cesar, Gregor Hodgson, Jason Rubens and Alan E. Strong, 'Ecological and Socioeconomic Impacts of 1998 Coral Mortality in the Indian Ocean', *Ambio*, 28, March 1999, pp. 188–97; 'Maldives face extinction', *Indian Ocean Review*, I, 4, December 1988, p. 11.

77 Economist, 28 October–4 November 2000, p. 44.

78 S. Carpenter, 'Polluted Air Chokes Northern Indian Ocean', *Science News*, 19 June 1999; 'Rimwatch', *Indian Ocean Review*, XII, 2, September 1999, p. 2; Charon Birkett, Ragu Murtugudde and Tony Allen, 'Indian Ocean Climate Event Brings Floods to East Africa's Lakes and the Sudd March', *Geophysical Research Letter*, XXVI, 1999, pp. 1031–34.

79 Rhys Richards, 'The Maritime Fur Trade: Sealers and Other Residents on St. Paul and Amsterdam Islands', *Great Circle*, VI, 1984, p. 25.

80 Jacques-Yves Cousteau, *The Living Sea*, New York, Nick Lyons Books, 1963, pp. 147–8.

81 Rodney Fox, 'The Sea beyond the Outback: The Coast of Northwest Australia', *National Geographic*, Jan. 1991, p. 48; Bruce Montgomery, 'Skullduggery Galore in the Great Patagonian Toothfish Conspiracy', *Indian Ocean Review*, X, 4, December 1997, p. 6.

82 Sydney Morning Herald, 22 May 2001.

83 Thor Heyerdahl, *The Tigris Expedition: In Search of our Beginnings*, Garden City, Doubleday, 1981, p. 175.

- 84 Geoffrey Till, 'Security Concerns in the Indian Ocean: Making Waves?', *RUSI Journal*, 142, June 1997, p. 16.
- 85 'Rimwatch,' *Indian Ocean Review*, XIII, 1, March 2000, p. 2.
- 86 Frater, *Chasing the Monsoon*, p. 83.
- 87 Brian Shoesmith, 'The Place of Indian Popular Films in the Indian Ocean Region and South East Asia: Some Speculations', *Indian Ocean Newsletter*, VII, 1, March 1986, pp. 6–10.
- 88 John Sinclair and Mark Harrison, 'Globalisation and Television in Asia: The Cases of India and China', in D. Ghosh and S. Muecke, eds, *UTS Review*, 2000, VI, 2, 'The Indian Ocean', pp. 79–82.
- 89 Michael Lambek, 'Choking on the Quran: And Other Consuming Parables from the Western Indian Ocean Front', in Wendy James, ed., *The Pursuit of Certainty: Religious and Cultural Formulations*, London, Routledge, 1995, p. 277.
- 90 K.M. Panikkar, *India and the Indian Ocean: An Essay on the Influence of Sea Power on Indian History*, London, Allen & Unwin, 1945, p. 7.
- 91 William G. Hanne, 'From Moscow, South By Southeast...'Military Review, 56, 1976, pp. 47–55.
- 92 Patrick Wall, ed., *The Indian Ocean and the Threat to the West*, London, Stacey International, 1975, pp. 9–11.
- 93 Philip Towle, *Naval Power in the Indian Ocean: Threats, Bluffs and Fantasies*, Canberra, Australian National University, Research School of Pacific Studies, 1979 is especially sensible. Also D.B.G. McLean, 'The Soviet Navy in the Indian Ocean', *Journal of the Royal United Services Institute for Defence Studies*, 118, 4, 1973, pp. 59–65; William F. Hickman, 'Soviet Naval Policy in the Indian Ocean', *U.S. Naval Institute Proceedings*, 105, 8, 1979, pp. 42–52, and for a Soviet view, Alexander I. Chicherov, 'South Asia and the Indian Ocean in the 1980's: Some Trends toward Changes in International Relations', *Asian Survey*, 24, 1984, pp. 1117–30.
- 94 David C. Potter, 'Superpower Rivalry in the Indian Ocean and the Foreign Policy Choices in India and Pakistan', in Borsa, ed., *Trade and Politics*, pp. 103–20.

95 Vivian L. Forbes, 'British Indian Ocean Territory: Chagos Archipelago', *Indian Ocean Review*, V, 1, March 1992, pp. 16–19; John Pilger, 'A Little-Known and Suppressed British Atrocity in a Faraway island [i.e. Diego Garcia]', *New Statesman*, 27 September 1996, 4302; Joseph E. Harris, 'The Ilois Tragedy', *TransAfrica Forum*, 7, 1, 1990, pp. 25–30; Jean Houbert, 'France in The Indian Ocean – Decolonizing Without Disengaging', *Round Table*, 298, 1986, pp. 145–66.

96 Kirby L. Baker, 'Diego Garcia', *Indian Ocean Review*, II, 3, September 1989, pp. 27–8; Harris, 'The Ilois Tragedy'.

97 Jaswant Singh, *Defending India*, Basingstoke, Macmillan, 1999, pp. 113–28, 179; Jole Larus, 'India and Its Ocean: The Atypical Relationship Ends', in Robert Bruce, ed., *The Modern Indian Navy and the Indian Ocean: Developments and Implications*, Perth, Centre for Indian Ocean Regional Studies, 1989, p. 65.

98 The Hindu, 17 December 1999.

99 Sydney Morning Herald, 8 February 2002.

100 Quoted in Satvinder Singh Rai, 'India's Strategy in the Indian Ocean: Indian Aims and Interests in a Historical Perspective', *Internationales Asienforum*, 20, 1989, p. 140.

101 Singh, *Defending India*, pp. 225, 232–4.

102 Vivian L. Forbes, 'Acts of Piracy: A Mystique of the 1990s', *Indian Ocean Review*, XI, 2, December 1998, pp. 10–15.

103 Rai, 'India's Strategy', p. 148; *UN Chronicle*, December 1989; Walter K. Andersen, 'Soviets in the Indian Ocean: Much Ado About Something – But What?', *Asian Survey*, 24, 1984, pp. 919–20.

104 McDougall, 'Indian Ocean Regionalism', pp. 59–60.

105 'Indian Ocean Rim Association for Regional Cooperation', *Indian Ocean Review*, XIII, 1, March 2000, pp. 3–7; Chaturvedi, 'Common Security?', pp. 718–19.

106 'Indian Ocean Rim Association for Regional Cooperation', p. 3.

107 See Stilgoe's whole chapter on this matter, *Alongshore*, pp. 369–402.

Select bibliography

Articles

Andersen, Walter K., 'Soviets in the Indian Ocean: Much Ado about Something – but what?' *Asian Survey*, 1984, 24, pp. 910–30.

Anderson, J.L., 'Piracy and World History: An Economic Perspective on Maritime Predation', *Journal of World History*, 1995, VI, pp. 175–99.

Arnold, David, 'The Indian Ocean as a Disease Zone, 1500–1950', South Asia, 1991, 14, pp. 1–21.

Barendse, R.J., 'Trade and State in the Arabian Seas: A Survey from the Fifteenth to the Eighteenth Century', *Journal of World History*, 2000, XI, pp. 173–225.

Bowen, Richard LeBaron, 'Arab Dhows of Eastern Arabia', American Neptune, 1949, 9, pp. 87–132.

Bowen, Richard LeBaron, 'The Dhow Sailor', *The American Neptune*, 1951, 11, pp. 161–203.

Broeze, Frank, 'From Imperialism to Independence: The Decline and Re-Emergence of Asian Shipping', *Great Circle*, 1987, IX, pp. 73–95.

Broeze, Frank, 'Underdevelopment and Dependence: Maritime India under the Raj', *Modern Asian Studies*, 1984, XVIII, pp. 429–57.

Broeze, Frank, Peter Reeves and Kenneth McPherson, 'Imperial Ports and the Modern World Economy: The Case of the Indian Ocean', *Journal of Transport History*, 1986, 7, pp. 1–20.

Campbell, I.C., 'The Lateen Sail in World History', Journal of World History, 1995, VI, pp. 1–23.

Chakravarti, Ranabir, 'Nakhudas and Nauvittakas: Ship Owning Merchants in the West Coast of India, c. AD1000–1500', *Journal of the Economic and Social History of the Orient*, 2000, 43, pp. 34–64.

Chaturvedi, Sanjay, 'Common Security? Geopolitics, Development, South Asia and the Indian Ocean', *Third World Quarterly*, 1998, XIX, pp. 701–24.

Clark, Alfred, 'Medieval Arab Navigation on the Indian Ocean: Latitude Determinations', *Journal of the American Oriental Society*, 1993, 113, pp. 360–74.

Dharmasena, K., 'The Port and Dock Workers of Colombo, 1860–1960', *Great Circle*, 1985, VII, pp. 100–15.

Emmerson, Donald K., 'The Case for a Maritime Perspective on Southeast Asia', *Journal of Southeast Asian Studies*, 1980, XI, pp. 139–45.

Ewald, Janet J., 'Crossers of the Sea: Slaves, Freedmen, and Other Migrants in the Northwestern Indian Ocean, c. 1750–1914', *American Historical Review*, 2000, 105, pp. 69–91.

Finney, Ben, 'The Other One-Third of the Globe', *Journal of World History*, 1994, V, pp. 273–97.

Flynn, Dennis O. and Arturo Giráldez, 'Born with a Silver Spoon: The Origin of World Trade in 1571', *Journal of World History*, 1995, VI, pp. 201–21.

Green, Jeremy, 'Maritime Archaeology and the Indian Ocean', *Great Circle*, 1980, 2, pp. 3–12.

Halfdanardottir, Jona, 'Social Mobilization in Kerala: Fishers, Priests, Unions and Political Parties', *MAST*, 1993, VI, pp. 136–56.

Harris, Jeff, 'The Dhow of Racing', *Aramco World*, May–June 1999, pp. 2–11.

Heimann, James, 'Small Change and Ballast: Cowry Trade and Usage as an Example of Indian Ocean Economic History', *South Asia*, 1980, III, pp. 48–69.

Hess, Andrew C., 'Piri Reis and the Ottoman Response to the Voyages of Discovery', *Terrae Incognitae*, 1974, VI, pp. 19–37.

Hess, Andrew C., 'The Evolution of the Ottoman Seaborne Empire in the Age of Oceanic Discoveries, 1453–1525', *American Historical Review*, 1970, LXXV, pp. 1892–919.

Horton, Mark, 'Mare Nostrum – a new archaeology of the Indian Ocean?', *Antiquity*, 1997, 71, pp. 747–49.

Jones, Stephanie, 'British India Steamers and the Trade of the Persian Gulf, 1862–1914', *Great Circle*, 1985, VII, pp. 23–44.

Manguin, Pierre-Yves, 'Late Mediaeval Asian Shipbuilding in the Indian Ocean: A Reappraisal', *Moyen Orient & Océan Indien*, 1985, II, 2, pp. 1–30.

Manguin, Pierre-Yves, 'The Southeast Asian Ship: An Historical Approach', *Journal of Southeast Asian Studies*, 1980, XI, pp. 266–76.

Martin, E.B., 'The Present Day Dhow Trade of India', Great Circle, 1982, IV, pp. 105–18.

Martin, Esmond Bradley, 'The Decline of the Omani Dhows', *Great Circle*, 1980, II, pp. 74–86.

Martin, Esmond Bradley, 'The Geography of Present-Day Smuggling in the Western Indian Ocean: The Case of the Dhow', *Great Circle*, 1979, I, pp. 18–35.

Munro, J. Forbes, 'Shipping Subsidies and Railway Guarantees: William Mackinnon, Eastern Africa and the Indian Ocean, 1860–93', *Journal of African History*, 1987, 28, pp. 209–30.

Murphey, Rhoads, 'The City in the Swamp: Aspects of the Site and Early Growth of Calcutta', *Geographical Journal*, 1964, 130, pp. 241–56.

Nieuwenhuys, Olga, 'Invisible Nets: Women and Children in Kerala's Fishing', *MAST*, 1989, II, pp. 174–94.

Pearson, M.N., 'Brokers in Western Indian Port Cities: Their Role in Servicing Foreign Merchants', *Modern Asian Studies*, 1988, XXII, pp. 455–72.

Pearson, M.N., 'Conversions in Southeast Asia: Evidence from the Portuguese Records', *Portuguese Studies*, 1990, VI, pp. 53–70.

Pokrant, Bob, 'Export-Oriented Aquaculture in Bangladesh: Changing Business Practices, Labour Organisation and Local Environments', *Indian Ocean Review*, March 2000, XIII, 1.

Pokrant, Bob and Peter Reeves, 'Putting Globalisation in its Place: Globalisation, Liberalisation and Export-Oriented Aquaculture in West Bengal and Bangladesh', *South Asia*, 2001, XXIV, pp. 159–84.

Prados, Edward, 'Indian Ocean Littoral Maritime Evolution: The Case of the Yemeni *Huri* and *Sanbuq*', *Mariner's Mirror*, 1997, 83, pp. 185–98.

Ray, Haraprasad, 'An Analysis of the Chinese Maritime Voyages into the Indian Ocean during the early Ming Dynasty and their Raison d'être', *China Reports*, 1987, 23, pp. 65–87.

Ray, Haraprasad, 'The Eighth Voyage of the Dragon that Never was: An Enquiry into the Causes of Cessation of the Voyages during the Early Ming Dynasty', *China Reports*, 1987, 23, pp. 157–78.

Ray, Himanshu Prabha, 'The Western Indian Ocean and the Early Maritime Links of the Indian Subcontinent', *Indian Economic and Social History Review*, 1994, 31, pp. 65–88.

Reeves, P., A. Pope, J. McGuire and B. Pokrant, 'Mapping India's Maritime Resources: Colonial State Experiments, c. 1908–1930', *South Asia*, 1996, XIX, pp. 13–35.

Reeves, Peter, Frank Broeze and Kenneth McPherson, 'The Maritime Peoples of the Indian Ocean Region since 1800', *Mariner's Mirror*, 1988, 74, pp. 241–54.

Routledge, Paul, 'Consuming Goa: Tourist Site as Dispensable Space', *Economic and Political Weekly*, 22 July 2000.

Rubinoff, Janet Ahner, 'Pink Gold: Transformation of Backwater Aquaculture on Goa's Khazan Lands', *Economic and Political Weekly*, 31 March 2001.

Russell-Wood, A.J.R., 'Seamen Ashore and Afloat: The Social Environment of the Carreira da India, 1550–1750', *Mariners'Mirror*, 1983, LXIV, pp. 35–52.

Shoesmith, Brian, 'The Place of Indian Popular Films in the Indian Ocean Region and South East Asia: Some Speculations', *Indian Ocean Newsletter*, March 1986, VII, 1.

Smith, Monica L., 'The Dynamic Realm of the Indian Ocean: A Review', *Asian Perspectives*, 1997, 36, pp. 245–59.

Toufique, Kazi Ali, 'Sandwiched between Us and Them: Dilemmas and Contradictions in the Shrimp-Processing Export Sector of Bangladesh in the Globalisation Process', *South Asia*, 2001, XXIV, pp. 185–99.

Varadarajan, Lotika, 'Indian Seafaring: The Precept and Reality of Kalivarjya', *Great Circle*, 1983, V, pp. 1–12.

Varadarajan, Lotika, 'Traditions of Indigenous Navigation in Gujarat', *South Asia*, 1980, III, pp. 28–35.

Books

Andaya, Barbara, *To Live as Brothers: Southeast Sumatra in the Seventeenth and Eighteenth Centuries*, Honolulu, University of Hawaii Press,1993.

Arasaratnam, Sinnappah, *Maritime Commerce and English Power: Southeast India 1750–1800*, Aldershot, Variorum, 1996.

Arasaratnam, Sinnappah, *Maritime India in the Seventeenth Century*, New Delhi, Oxford University Press, 1994.

Arasaratnam, Sinnappah, *Merchants, Companies and Commerce on the Coromandel Coast*, 1650–1740, New Delhi, Oxford University Press, 1986.

Banga, Indu, ed., Ports and their Hinterlands in India, 1700–1950, New Delhi, Manohar, 1992.

Barendse, R.J., *The Arabian Seas*, 1640–1700, Leiden, Research School, CNWS, Leiden University, 1998.

Barendse, R.J., *The Arabian Seas*, *The Indian OceanWorld of the Seventeenth Century*, Armonk, NY, M.E. Sharpe, 2002.

Bethencourt, Francisco and D. Ramada Curto, eds, *Portuguese Expansion*, *1400–1822: A Collection of Essays*, New York, Cambridge University Press, forthcoming.

Blussé, Leonard, *Strange Company: Chinese Settlers*, *Mestizo Women*, *and the Dutch in VOC Batavia*, Dordrecht, Holland, Riverton, USA, Foris Publications, 1986.

Borsa, Giorgio, ed., *Trade and Politics in the Indian Ocean: Historical and Contemporary Perspectives*, Delhi, Manohar, 1990.

Bose, Sugata, The Indian Ocean Rim: An Inter-Regional Arena in the Age of Global Empire, forthcoming.

Boxer, C.R., The Portuguese Seaborne Empire, London, Hutchinson, 1969.

Braudel, Fernand, Civilization and Capitalism, New York, Harper & Row, 1981–84, 3 vols.

Braudel, Fernand, *The Mediterranean and the Mediterranean World in the Age of Philip II*, London, Collins, 1972, 2 vols.

Brennan, Lance, and Brij Lal, eds, *South Asia*, 1998, XXI, Special Issue, 'Across the Kala Pani: Indian Overseas Migration and Settlement'.

Broeze, Frank, ed., *Brides of the Sea: Port Cities of Asia from the 16th-20th Centuries*, Sydney, New South Wales University Press, 1989.

Broeze, Frank, ed., *Gateways of Asia: Port Cities of Asia from the 13th to the 20th Centuries*, London, Kegan Paul International, 1997.

Butel, Paul, *The Atlantic*, London, Routledge, 1999.

Chandra, Satish, ed., *The Indian Ocean: Explorations in History, Commerce and Politics*, New Delhi, Sage, 1987.

Chaudhuri, K.N., *Trade and Civilization in the Indian Ocean: An Economic History from the Rise of Islam to 1750*, Cambridge, Cambridge University Press, 1985.

Commans, Jos and Jacques Leider, eds, *The Maritime Frontier of Burma: Exploring Political, Cultural and Commercial Interaction in the Indian Ocean World*, 1200–1800, Leiden, Leiden University Press, 2002.

Dale, Stephen, *Islamic Society on the South Asian Frontier: The Mapillas of Malabar (1498–1922)*, Oxford, Clarendon Press, 1980.

Dale, Stephen Frederic, *Indian Merchants and Eurasian Trade*, 1600–1750, Cambridge University Press, 1994.

Das Gupta, Ashin, *Indian Merchants and the Decline of Surat c. 1700–1750*, reprint of 1979 edition, New Delhi, Manohar, 1994.

Das Gupta, Ashin and M.N. Pearson, eds, *India and the Indian Ocean*, *1500–1800*, Calcutta, Oxford University Press, 1987, 2nd ed., New Delhi, Oxford University Press, 1999.

Das Gupta, Uma, ed., *The World of the Indian Ocean Merchant*, 1500–1800: Collected Essays of Ashin Das Gupta, New Delhi, Oxford University Press, 2001.

Dharmasena, K., *The Port of Colombo*, 1860–1939, Colombo, Ministry of Higher Education, 1980.

Disney, Anthony and Emily Booth, eds, *Vasco da Gama and the Linking of Europe and Asia*, New Delhi, Oxford University Press, 2000.

Dunn, Ross, *The Adventures of Ibn Battuta*, Berkeley, University of California Press, 1986.

Everaert, J. and J. Parmentier, eds, *International Conference on Shipping, Factories and Colonization* (*Brussels, 24–26 November 1994*), Brussels, Koninklijke Academie van Belgie, 1996.

Fawaz, Leila Tarazi and C.A. Bayly, eds, *Modernity and Culture: From the Mediterranean to the Indian Ocean*, New York, Columbia University Press, 2002.

Fischer, Lewis R., ed., *From Wheel House to Counting House: Essays in Maritime Business History*, St. John's, NFLD, International Maritime Economic History, 1992.

Frank, Andre Gunder, *ReOrient : Global Economy in the Asian Age*, Berkeley, University of California Press, 1998.

Freitag, U. and W.G. Clarence-Smith, eds, *Hadhrami Traders*, *Scholars and Statesmen in the Indian Ocean*, *1750s-1960s*, Leiden, Brill, 1997.

Friedland, Klaus, ed., The Maritime Aspects of Migration, Cologne, Bohlau, 1987.

Furber, Holden, *Rival Empires of Trade in the Orient*, *1600–1800*, Minneapolis, University of Minnesota Press , 1976.

Ghosh, Devleena and Stephen Muecke, eds, UTS Review, 2000, VI, 2, 'The Indian Ocean'.

Godinho, Vitorino Magalhães, *Os descobrimentos e a economia mundial*, 2nd ed., Lisbon, Editorial Presença, 1981–83, 4 vols.

Goitein, S.D., Studies in Islamic History and Institutions, Leiden, Brill, 1966.

Haellquist, Karl Reinhold, ed., Asian Trade Routes: Continental and Maritime, London, Curzon Press, 1991.

Hattendorf, John B., ed., *Ubi Sumus? The State of Naval and Maritime History*, Newport, RI, Naval War College Press, 1994.

Hawkins, Clifford, *The Dhow: An Illustrated History of the Dhow and its World*, Lymington, Nautical Publishing Co., 1977.

Headrich, Daniel, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century*, New York, Oxford University Press, 1981.

Heyerdahl, Thor, The Tigris Expedition: In Search of our Beginnings, Garden City, Doubleday, 1981.

Horden, Peregrine and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History*, Vol. I, Oxford, Blackwell, 2000.

Horton, Mark, and John Middleton, *The Swahili: The Social Landscape of a Mercantile Society*, Oxford, Blackwells, 2000.

Hourani, George F., revised and expanded by John Carswell, *Arab Seafaring in the Indian Ocean in Ancient and Medieval Times*, Princeton, NJ, Princeton University Press, 1995.

Howarth, David Armine, *Dhows*, London, New York, Quartet Books, 1977.

Jewell, John, *Dhows at Mombasa*, Nairobi, East African Publishing House, 1969.

Kathirithamby-Wells, J. and John Villiers, eds, *The Southeast Asian Port and Polity: Rise and Demise*, Singapore, Singapore University Press, 1990.

Kirby, David and Merja-Liisa Hinkkanen, *The Baltic and North Seas*, London, Routledge, 2000.

Levathes, Louise, *When China Ruled the Seas: The Treasure Fleet of the Dragon Throne*, 1405–33, New York, Oxford University Press, 1994.

Lombard, Denys and Jean Aubin, eds, *Marchands et Hommes d'affairs Asiatiques dans l'Océan Indien et la Mer de Chine 13e-20e siècles*, Paris, Editions de l'Ecole des hautes études en sciences sociales, 1988. English translation, Delhi, Oxford University Press, 2000.

MacLeod, Roy and Deepak Kumar, eds, *Technology and the Raj: Western Technology and Technical Transfers to India*, *1700–1947*, New Delhi, Sage Publications, 1995.

McPherson, Kenneth, *The Indian Ocean: A History of People and the Sea*, Delhi, Oxford University Press, 1993.

Malekandathil, Pius and Jamal Mohammed, eds, *The Portuguese, Indian Ocean and European Bridgeheads 1500–1800: Festschrift in Honour of Prof. K.S. Mathew*, Tellicherry, Kerala, Institute for Research in Social Sciences and Humanities of MESHAR, 2001.

Markovits, Claude, *The Global World of Indian Merchants*, Cambridge, Cambridge University Press, 2000.

Martin, Esmond Bradley and Chryssee Perry Martin, Cargoes of the East: The Ports, Trade and Cultures of the Arabian Sea and Western Indian Ocean, London, Elm Tree Books, 1978.

Mathew, K.S., ed., *Mariners, Merchants and Oceans: Studies in Maritime History*, New Delhi, Manohar Publishers, 1995.

Mathew, K.S., ed., *Studies in Maritime History*, Pondicherry, Pondicherry University, 1990.

Matvejevic, Predrag, *Mediterranean: A Cultural Landscape*, Berkeley, University of California Press , 1999.

Middleton, John, *The World of the Swahili*, *An African Mercantile Civilisation*, New Haven, Yale University Press, 1992.

Mollat du Jourdin, Michel, *Europe and the Sea*, Oxford, Blackwell, 1993.

Mukherjee, Rudrangshu and Lakshmi Subramanian, eds, *Politics and Trade in the Indian Ocean World: Essays in Honour of Ashin Das Gupta*, New Delhi, Oxford University Press, 1998.

Northrup, David, *Indentured Labour in the Age of Imperialism*, 1834–1922, Cambridge, Cambridge University Press, 1995.

Pagden, Anthony, Facing Each Other: The World's Perceptions of Europe and Europe's Perceptions of the World, Aldershot, Variorum, 1999, 2 vols.

Palmer, S. and G. Williams, eds, *Charted and Uncharted Waters*, London, National Maritime Museum in association with the Department of History, Queen Mary College, University of London, 1982.

Panikkar, K.M., *India and the Indian Ocean: An Essay on the Influence of Sea Power on Indian History*, London, Allen & Unwin, 1945.

Parkin, David, ed., Continuity and Autonomy in Swahili Communities: Inland Influences and Strategies of Self-determination, London, SOAS, 1994.

Parkin, David, and Stephen C. Headley, eds, *Islamic Prayer across the Indian Ocean: Inside and Outside the Mosque*, Richmond, Curzon, 2000.

Pearson, M.N., Coastal Western India, Studies from the Portuguese Records, New Delhi, Concept Publishers, 1981.

Pearson, M.N., *Pious Passengers: The Hajj in Earlier Times*, Delhi, Sterling, and London, Hurst, 1994.

Pearson, M.N., *Port Cities and Intruders: The Swahili Coast, India, and Portugal in the Early Modern Era*, Baltimore, The Johns Hopkins University Press, 1998.

Pearson, M.N., ed., Spices in the Indian Ocean World, Aldershot, Variorum, 1996.

Pearson, M.N., *The Portuguese in India*, Cambridge, Cambridge University Press, 1987.

Pearson, M.N. and I. Bruce Watson, eds, *South Asia*, 1996, XIX, Special Issue, 'Asia and Europe: Commerce, Colonialism and Cultures: Essays in Honour of Sinnappah Arasaratnam'.

Prakash, Om, *European Commercial Enterprise in Pre-Colonial India*, Cambridge, Cambridge University Press, 1998.

Prakash, Om and Denys Lombard, eds, *Commerce and Culture in the Bay of Bengal*, 1500–1800, New Delhi, Manohar, 1999.

Ptak, Roderich, *China's Seaborne Trade with South and Southeast Asia (1200–1750)*, Aldershot, Ashgate, 1999.

Ptak, Roderich, ed., J.V.G. Mills, trans., *The Overall Survey of the Star Raft by Fei Hsin*, Wiesbaden, Harrassowitz, 1996.

Ptak, Roderich and Dietmar Rothermund, eds, *Emporia*, *Commodities and Entrepreneurs in Asian Maritime Trade*, *c.* 1400–1750, Stuttgart, Steiner, 1991.

Qaisar, A. Jan, *The Indian Response to European Technology and Culture*, *AD 1498–1707*, Delhi, Oxford University Press, 1982.

Qasimi, Sultan Md. Al-, The Myth of Arab Piracy in the Gulf, London, Croom Helm, 1986.

Rao, S.R., Marine Archaeology of Indian Ocean Countries: Proceedings of the First Indian Conference on Marine Archaeology of Indian Ocean Countries, Dona Paula, Goa, National Institute

of Oceanography, 1988.

Rao, S.R., ed., Recent Advances in Marine Archaeology: Proceedings of the Second Indian Conference on Marine Archaeology of Indian Ocean Countries, Dona Paula, Goa, Society for Marine Archaeology, National Institute of Oceanography, 1991.

Ray, Himanshu Prabha, *The Winds of Change: Buddhism and the Maritime Links of Early South Asia*, Delhi, New York, Oxford University Press, 1994.

Ray, Himanshu Prabha, ed., *Archaeology of Seafaring: The Indian Ocean in the Ancient Period*, Delhi, Pragati Publications, 1999.

Ray, Himanshu Prabha and Jean-Francois Salles, eds, *Tradition and Archeology: Early Maritime Contacts in the Indian Ocean*, New Delhi, Manohar, 1996.

Reade, Julian, ed., Indian Ocean in Antiquity, London, Kegan Paul, 1996.

Revista de Cultura, Macau, Nos 13/14, 1991, 'The Asian Seas, 1500–1800: Local Societies, European Expansion and the Portuguese'.

Risso, Patricia, *Merchants and Faith: Muslim Commerce and Culture in the Indian Ocean*, Boulder, Westview, 1995.

Romanis, F. De and A. Tchernia, eds, Crossings, New Delhi, Manohar, 1997.

Scammell, G.V., *The World Encompassed: The First European Maritime Empires*, *c.* 800–1650, London, Methuen, 1981.

Severin, Tim, *The Sindbad Voyage*, London, Hutchinson, 1982.

Smith, M. Estellie, ed., *Those Who Live from the Sea: A Study in Maritime Anthropology*, St. Paul, West Publishing Co., 1977.

Sopher, David, *The Sea Nomads*, Singapore, Printed by Lim Bian Han, Government printer, 1965.

Souza, Teotonio R. de and Charles J. Borges, eds, *Mare Liberum*, No. 9, 1977, 'Portuguese India and its Northern Province, Proceedings of the 7th International Seminar on Indo-Portuguese History'.

Spate, O.H.K., *The Pacific since Magellan*, Canberra, Australian National University Press, 1979–88, 3 vols.

Subramanian, Lakshmi, *Indigenous Capital and Imperial Expansion: Bombay, Surat, and the West Coast*, New Delhi, Oxford University Press, 1996.

Tampoe, Moira, Maritime Trade between China and the West: An Archaeological Study of the Ceramics from Siraf (Persian Gulf), 8th to 15th Centuries A.D, Oxford, British Archaeological Reports, 1989.

Tinker, Hugh, *A New System of Slavery: The export of Indian labour overseas*, 1830–1920, London, Oxford University Press, 1974.

Toussaint, Auguste, History of the Indian Ocean, Chicago, University of Chicago Press, 1966.

Villiers, Alan, The Indian Ocean, London, Museum Press, 1952.

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